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A QUANTITATIVE ANALYSIS COVERING 60 YEARS OF CHANGING
PATTERNS OF LAND USE ALONG A MAJOR TRAFFIC
ARTERIAL IN SIOUX FALLS, SOUTH DAKOTA

BY

VIRGIL CLAYTON SANDVIG

A thesis submitted
in partial fulfillment of the requirements for the
degree Master of Science, Major in
Geography, South Dakota
State University

1974

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A QUANTITATIVE ANALYSIS COVERING 60 YEARS OF CHANGING
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This thesis is approved as a creditable, independent investigation by a candidate for the degree, Master of Science, and acceptable as meeting the thesis requirements for this degree; but without implying that the conclusions reached by the candidate are necessarily the conclusions of the major department.

Thesis ~~Ad~~visor Date

Head, Geography ~~Department~~ Date

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A special note must be accorded my life-time companion and understanding wife, Jan, for her encouragement, criticism, and advice.

The Sioux Falls City Planning and Engineering Offices with their congenial staffs; the South Eastern Council of Governments; the Pettigrew Museum, and a number of individuals who were cooperative beyond expectations.

Any errors or failures in this study must be the writer's responsibility and should in no way reflect upon those who were offering their assistance.

V.C.S.

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CHAPTER I

INTRODUCTION

A very small segment of our earth is treated in this paper, both in space and time parameters; however, the intention of the writer is similar to that of most writers of geographical literature--to aid in improving the arrangement of human activities. It is the general purpose of this study to better understand the evaluation of changing landuse and its implication on human activities as it pertains to a specific arterial. More specifically, the objectives of this study can be stated in question form as follows:

1. Does the landuse along a traffic artery show commercial establishments that are more successful than other commercial establishments?
2. Does the existence of traffic use on a thoroughfare present incompatibility or conflict with multiple commercial landuse purposes along a thoroughfare?
3. Does the widening of a thoroughfare attract commercial establishments along the thoroughfare?
4. Does the commercial activity along main thoroughfares create urban blight or does this commercial activity create a condition of urban growth?
5. Is the landuse along traffic thoroughfares controlled by a competing market or is the landuse along traffic thoroughfares controlled by political-economic forces?

Minnesota Avenue, a commercially-zoned strip in Sioux Falls, South Dakota, referred to as an urban arterial by the City Planning Office of major arterial by Harlan Bartholomew and Associates, constitutes the study area. We are concerned in this study with a narrow (eighty feet of right of way, twenty-seven city blocks long) piece of public land and its contact with both private and public parcels of property. (See Figure 1)

Minnesota Avenue in its entirety extends from South Dakota Highway 38 on the north through the approximate center of the city of Sioux Falls joining Interstate 229, a circumferential route on the east and south. All of Minnesota Avenue with its obvious multiple function was considered unwieldy for this study; therefore a segment was selected from West 14th Street on the north to West 41st Street on the south. West 14th Street closely approximates the juncture of Minnesota Avenue with the southwest corner of the central business district. The West 41st Street point constitutes a connection with a main artery moving west toward the only major shopping cluster of any size within the city.

The time frame consists of a period from 1923 to the present, with ten year landuse surveys according to commonly used selected major categories. Additional breakdown of the commercial category is obtained by using the 1972 Industrial Classification Index Manual.¹

Standard Industrial Classification Manual, United States Office of Management and Budget, 1972.

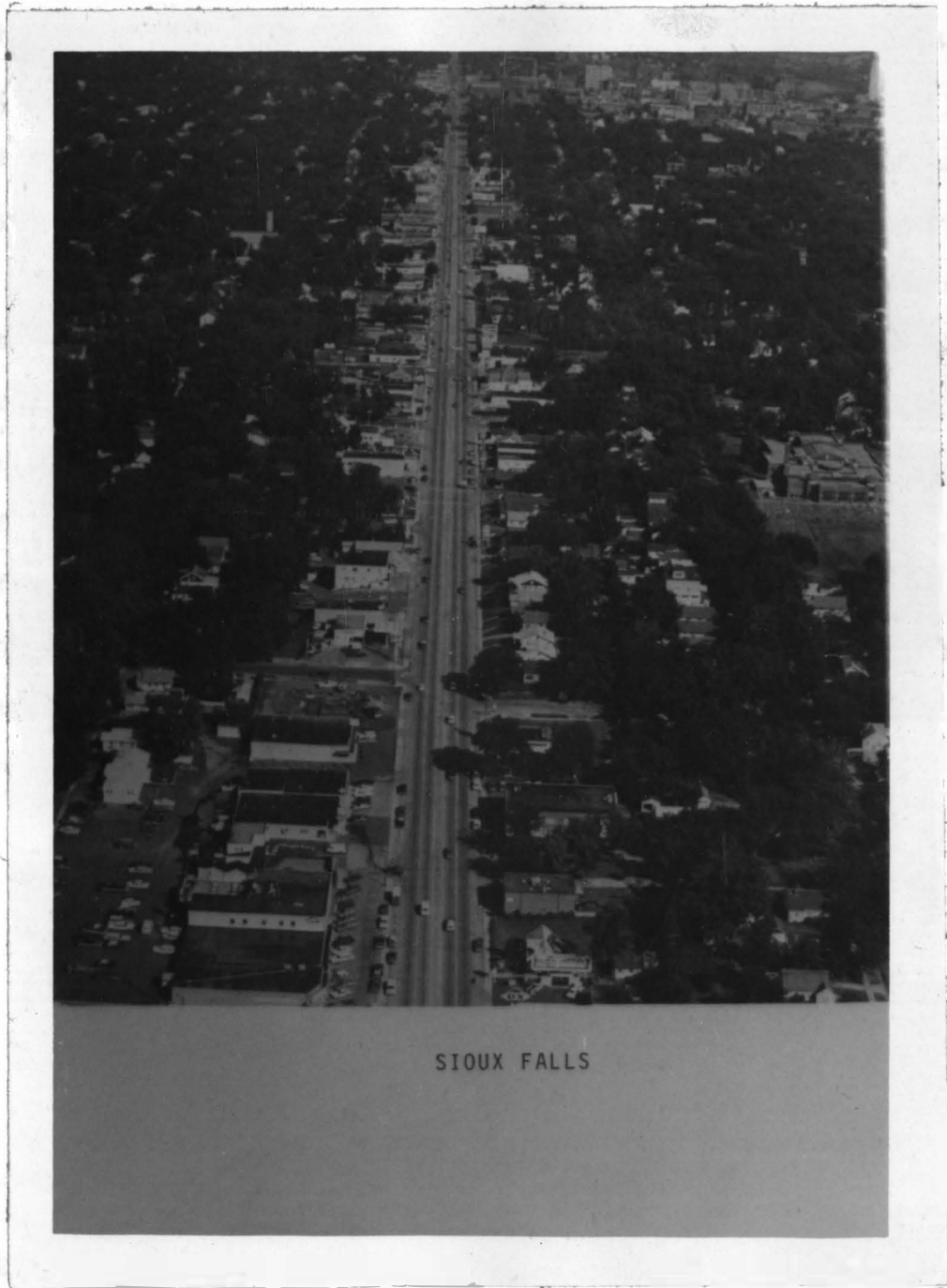


Figure 1. Minnesota Avenue Looking North From 31st St. West

The advent of the automobile and its effect on the social and economic interactions of people constituted a logical and significant time span. The methodology will incorporate the use of quantitative data and map landuse charts for an explanation of what has occurred. For purposes of this study, arterial or commercial strip will be treated as being synonymous with ribbon, strip, street, collector, and highway.

The justification for this study is based on the premise that what is learned by the analysis of this commercial strip should aid in future projections where existing population distribution and consumer income are comparable. Many of our cities today are horrible examples of business and government decisions predicated on the single criterion of economic efficiency rather than on maximizing the needs of people.¹ The distribution of space of human activity must reflect the needs and desires of society as a whole, not the narrow goals of property owners and investors.²

¹Melvin Albaum, Editor, Geography and Contemporary Issues: Studies of Relevant Problems, (New York: John Wiley & Son, 1973), pp. 1-8.

²Ibid., p. 5.

CHAPTER II

NEED FOR THE STUDY

The problems created by the rapid transformation of the urban scene has been a recent concern of society. Not the least of these problems is the advent of the commercial strip. Planners are concerned with traffic flows and neighborhood deterioration. Evidence of such deterioration may be found in Inter-Department correspondence from Planning Director Stephen D. Metli to the Mayor and Commissioners of Sioux Falls. Following are some quotations from that correspondence:

Strip zoning along major streets has been found to cause several problems in urban areas. This development pattern has been studied in depth since the late 1940's and has been found to be one of the least desirable. The development that results from land being zoned for commercial uses along major streets often result in -

1. Weak commercial areas that are prone to failure.
2. Neighborhood deterioration.
3. Problems with traffic flow.

...Commercial strips in cities throughout the nation have proven to be extremely vulnerable to any type of commercial center. When strong commercial centers develop in a city, the first areas to decline are the strips because of their functional obsolescence.

...Zoning residential areas for commercial will often cause neighborhood deterioration by encouraging speculation holding of property.

...Minnesota Avenue is an arterial street. The primary function of arterial streets is to move large volumes of traffic. Access should remain a secondary function. Commercial development

will often reverse these two functions where it is not practical to establish access roads to stacking lanes. The friction points that result from commercial development only interfere with traffic flow and are potential points for accidents.¹

John Rahenkamp, President of a consulting firm of planners in Philadelphia, supports a similar viewpoint as he states in a recent trade journal:

Strip zoning on highway frontage is unsafe and impractical. It should be eliminated. Traditional strip zoning--the old technique of permitting commercial and residential projects directly along main roads--leads to accidents and contributes to overburdened highways. So, we recommend to² clients that this type of zoning be outlawed on main roads.

Naturally, in this writers opinion everyone does not view problems from the same perspective. An example can be cited from the very entertaining and well-done work entitled St. Croix Border Country by two practical geographers. Here, authors Harry Swain and Cotton Mather refer to their colleague, Professor John Borchert, of the University of Minnesota, in the following manner:

Commercial Strips. Territorial Road was the nineteenth century connection for wagons between St. Paul and the developing industrial center around the Falls of St. Anthony. As late as 1867, according to the first edition of the Minneapolis Tribune, it was all but impassable after a rain shower. Today, its function has been taken over by University Avenue, parallel and one block south. The six miles of University Avenue, joining the central business districts of Minneapolis and St. Paul, form what

¹Inter-Department Correspondence, City of Sioux Falls, to Mayor and Commissioners from Stephen D. Metli, Planning Director, June 10, 1974.

²John Rahenkamp, President, Rahenkamp, Sachs, Wells & Assoc. Inc. "Strip Zoning on Highway Frontage is Unsafe and Impractical: It Should be Eliminated." Reprint, Wells & Associates, Philadelphia, Pa., p. 140.

must be one of the world's longest continuous commercial strips. Professor John Borchert hypothesizes that such strips are the necessary proving ground for innovators and entrepreneurs, and the Eight Day adventists (i.e., city planners) who advocate the wholesale removal of the "blighted" but cheap and accessible commercial strips are really chipping away at one of the less obvious cornerstones of American enterprise.¹

It appears that various members of society have different views concerning the commercial strip. Businessmen visualize economic opportunity; environmentalists observe blight; realtors spot locations; mothers see danger to their children; policemen see accidents and friction points; and these are only a small cross section of the populace.

This study attempts to add a little insight into the evolution of such a commercial strip. If the reader can visualize the process that has taken place, he will have a greater understanding of the cultural processes that are constantly altering the narrow interface of our atmosphere and earth. We have a constantly changing scene and thus it is necessary to probe the character and operation of the processes which produce change. If we understand these processes we might have a small building block to comprehend the present with a peephole into the future.

This writer analyzes the evolution of the strip from three stances: one, that land use along arterials maintains the status quo;

¹Harry Swain and Cotton Mather, St. Croix Border Country, (Minneapolis: The Lund Press Inc., 1968), p. 8.

second, that land use along arterials achieves an ideal stance; and last, radical changes occur due to unforeseen phenomena. Perceiving these three models the reader may then construct his own mental picture of what is needed and can use the same analysis for similar spatial distribution problems.

CHAPTER III

RELATED LITERATURE

Urban geography has been touched by a vast array of fields. Economists, sociologists, engineers, political scientists have all contributed to research about the urban scene. The quantity has been voluminous; however, when we narrow our objective to the confines of an avenue within a specific city, the source material becomes restricted. Raymond Murphy in his well known The American City: An Urban Geography, completely leaves out two aspects of this paper. He felt that site attributes are important only in understanding a particular city and therefore could not materially contribute to knowledge of the general American type. The other aspect is the historical factor; he states that no two cities have the same history.¹ However, in rebuttal to both points, it is this writer's contention that generalizations derived from this study will have validity when applied to other sites within this or similar regions. The upper midwest regional cultural landscape is not that diverse.

Another viewpoint that can be cited is that of Edward A. Ackerman in his Geography as a Fundamental Research Discipline. In 1958 he stated that some of the research which may be rewarding in the future

¹Raymond E. Murphy, The American City: An Urban Geography, (New York, New York: McGraw-Hill Inc., 1974), p.3-4.

might treat relatively simple situations, where one conspicuous feature changes like the construction of a highway. He adds that such data are conspicuously lacking at the present.¹

James Simmons wrote about the changes in the pattern of retail distribution, specifically in nucleations, ribbons and specialized shopping areas. His comments relative to the historical approach were:

In examining changes over time one may raise many questions concerned with defining the period of study, cross-sectional description of process versus process, the existence of discrete stages in historical process, the velocity of change, the different rates of change in different components, and the time lag between cause and effect. Because of the data inadequacies no answers were found to many of these questions in this study.²

The focal point of Simmons' study was to determine the extent of commercial blight within the metropolitan area of Chicago which entailed an investigation of the change in existing retail and service structures. He relied heavily on Brian J. L. Berry's study titled Commercial Structure and Commercial Blight. Berry, who is considered the most authoritative voice in the field of urban study in the United States, was Simmons' professor.

The data for the present study have been derived from the annual City Directories that were first published in 1898. The availability of such accurate information probably provided the impetus for this project.

¹Edward A. Ackerman, Geography as a Fundamental Research Discipline, Department of Geography Research Paper No. 53, The University of Chicago, Chicago, Illinois, 1958, p. 35-36.

²James Simmons, The Changing Pattern of Retail Location, Department of Geography Research Paper No. 92, The University of Chicago, Chicago, Illinois, 1964, p. 6-7.

Each parcel of land within and adjacent to the city is indicated either by the occupant or activity or both. The primary delimitation is short time change and the presence of vacant lots. The problem was alleviated by personal observation of street addresses and visits to the city engineer's office. Other primary sources are the very exhaustive studies by Harland Bartholomew & Associates made in 1950 and again in 1969, along with the land utilization and marketability studies by Larry Smith & Company also in 1969. Similar works such as the Sioux Falls Industrial Development Foundation publication called "Horizons-- Sioux Falls in the 70s," and the South Eastern Council of Governments' publication "Survey of City's Central Neighborhoods" in 1972 provided isolated but very important facts. Historically, most of the information was obtained from R. E. Bragstad's Sioux Falls in Retrospect. While much of the information goes beyond the scope of this thesis and does not confine itself to such narrow limits as Minnesota Avenue, it is still an excellent example of detail and validity.

The importance of such standard works as Raymond E. Murphy's previously mentioned The American City: An Urban Geography; F. Stuart Chapin, Jr.'s Urban Land Use Planning; Principles and Practice of Urban Planning, William I. Goodman, Editor; Brian J. L. Berry and Frank E. Horton's Geographic Perspectives on Urban Systems; and Maurice H. Yeates and Barry J. Garner's The North American City were all instrumental in giving this writer a deeper insight into the field of urban inquiry. Each of these sources was primarily concerned with central business

district research methods and with transportation studies. Very little was discovered in the literature that specifically concerned itself with land use along main transportation routes, nor was any discovered using a frontage approach with complete disregard for floor space, building heights, land values, retail sales or employment structure.

In summary, the related studies indicate several contributions pertinent to this study. They are as follows:

1. Documentation of City Directories and city office records is primary.
2. Publications of consulting firms and local agencies, while not specific in relation to the study area, provided information pertinent to the region.
3. Documented histories of Minnehaha County and Sioux Falls, while not presenting the evolution of Minnesota Avenue, provided the supplementary data necessary for an intelligent grasp of growth in a socio-economic frame.
4. Standard works show limited research in this field.

CHAPTER IV

HISTORICAL PERSPECTIVE

Perhaps it would be well to look into the history of the selected site. Our site is Minnesota Avenue, a north-south public thoroughfare in a midwestern central place called Sioux Falls.

Charles Pierre Le Sueur, a French fur trader in 1685, recorded that the Omaha or Mahu Indians occupied the region surrounding the present site of Sioux Falls.¹ Much later in 1839 Joseph Nicollet described the falls of the Sioux River, and in 1849 an act of Congress included the Sioux Falls area in its description of Minnesota Territory.

This led Dr. George Staples of Dubuque, Iowa, who established the Western Land Company, to send two men north from Sioux City, Iowa, to lay out a town site adjacent to the falls. This activity occurred in 1856.² The land surveyed at this time (Figure 2) was the Southwest Quarter of Section 9 and the Northwest Quarter of Section 16. Mr. David M. Mills, a representative of this company added 160 acres to the south, referred to as the Southwest Quarter of Section 16, for himself.³ This land was located in Township 101 North, Range 49 West

¹Arthur G. Horton, Editor, An Economic & Social Survey of Sioux Falls, South Dakota, Sioux Falls Chamber of Commerce and City of Sioux Falls, 1938-39.

²R. E. Bragstad, Sioux Falls in Retrospect, Sioux Falls, South Dakota, January, 1967, pp. 1-5.

³Ibid., p. 4.

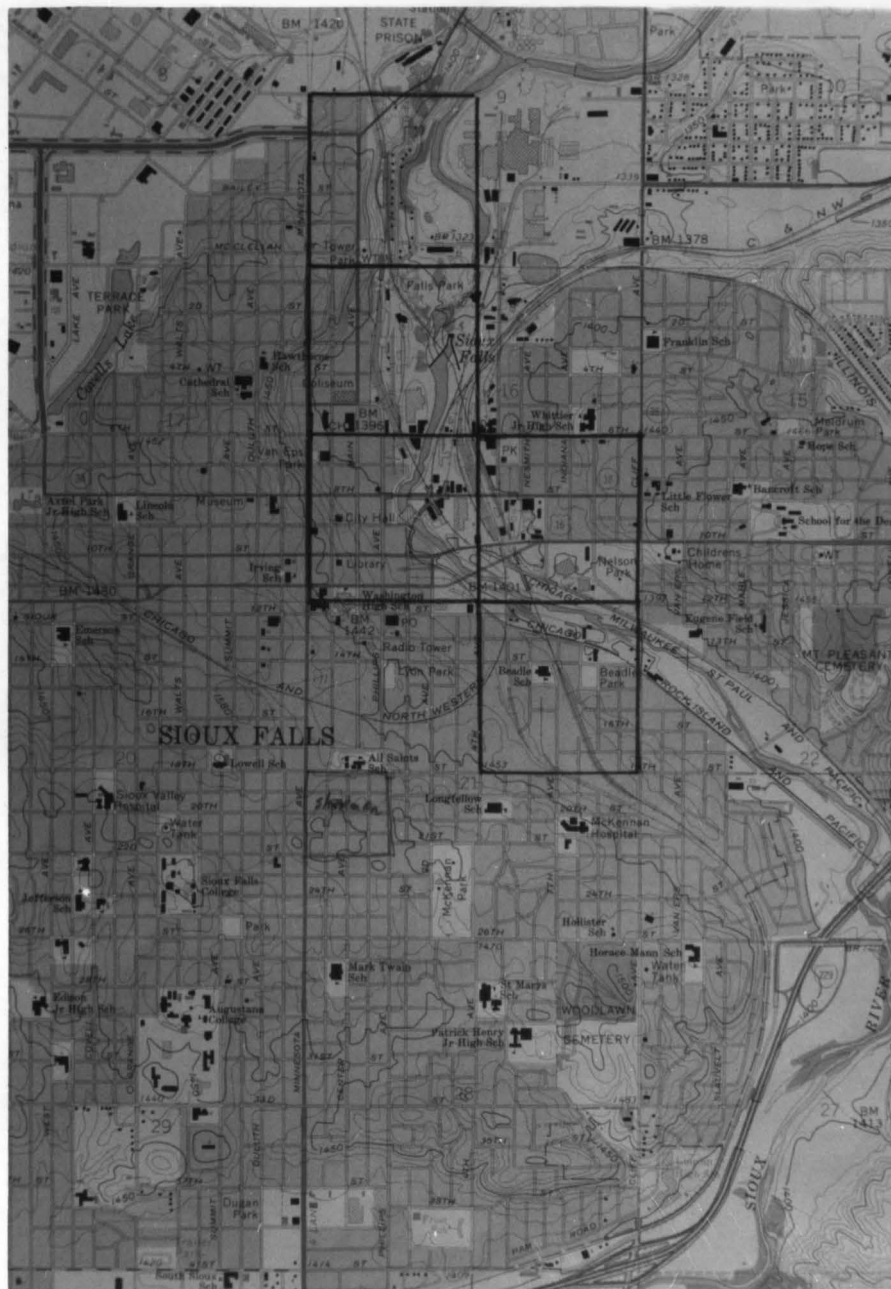


Figure 2. Outline of Early Townsite Claims on the Present Location of Sioux Falls, South Dakota.

of the 5th Principal Meridian.¹ The historical significance to our topic is that all three parcels of land had as their western boundary what was later to constitute the site of Minnesota Avenue. This is the western edge of Township 101 North. The first survey was conducted in 1859 by W. J. Neeley.² Later events not within the parameter of this study caused the people to evacuate the townsite in 1862.

In 1865 the military established a fort at the townsite which had been excluded in the creation of the State of Minnesota back in 1858.³ The present site of Minnesota Avenue was then prairie grass except that segment north of 12th street which was the western edge of the Sioux Falls townsite. The military left in 1870, and in 1871 the plot of the townsite was filed. At this time land sold for about \$2.50 per acre, lots for \$2.00 to \$10.00. By 1878, the population of the city had grown numerically to around 600 when the Chicago, St. Paul, Minneapolis and Omaha Railway entered the region causing population within the town to jump to 2,164 by 1880.⁴

Sioux Falls as it appeared in 1881 is shown in Figure 3.⁵ Minnesota Avenue is located on the first rise running parallel to the Sioux River. The intersection of 15th Street and Minnesota Avenue is

¹Ibid., p. 4.

²Horton, An Economic & Social Survey of Sioux Falls, S.D., p. 3.

³Ibid., p. 2.

⁴Bragstad, Sioux Falls in Retrospect, p. 127.

⁵Pettigrew Museum, 131 N. Duluth Avenue, Sioux Falls, South Dakota

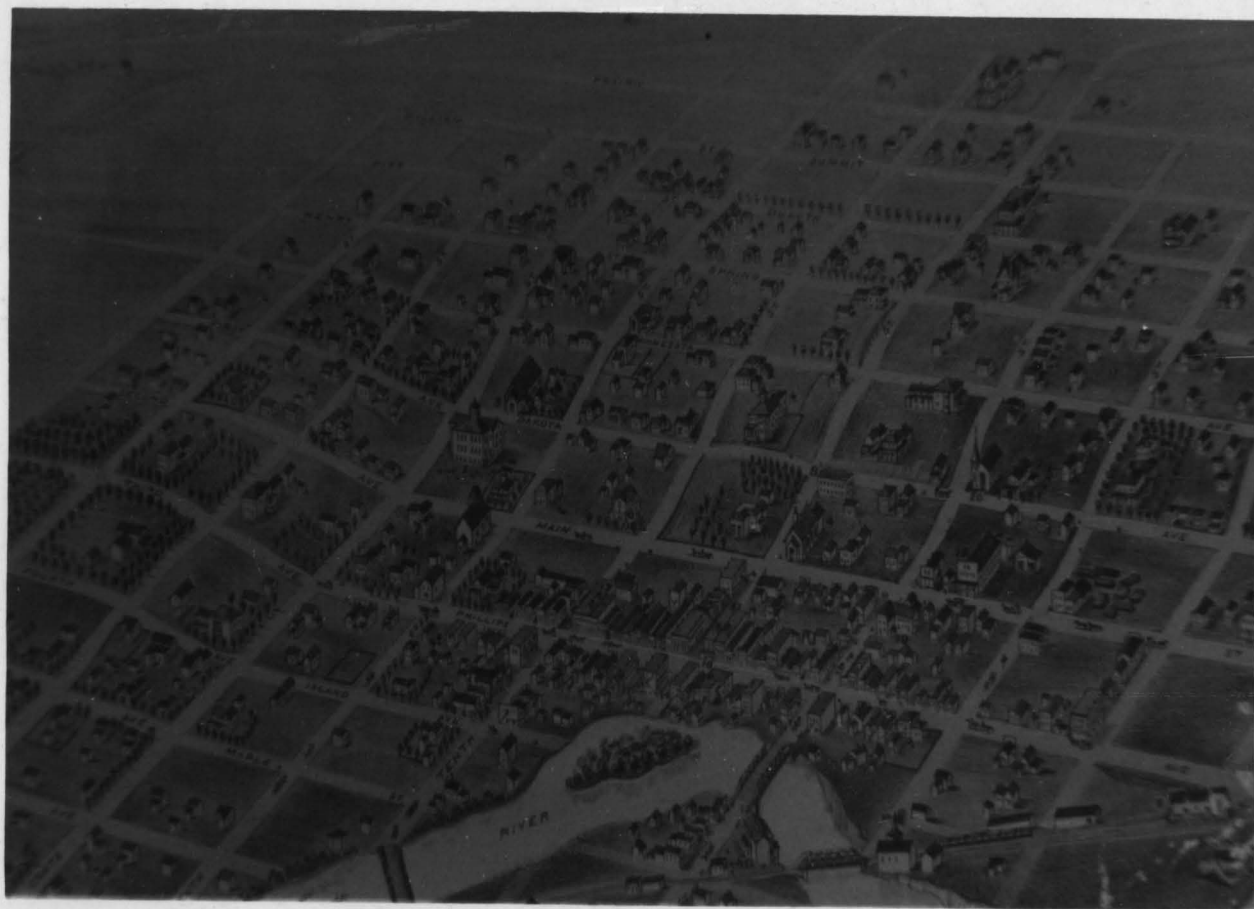


Figure 3. A Schematic Drawing of Sioux Falls with Streets and Avenues Around 1881.
Courtesy of the Pettigrew Museum, 131 North Duluth Avenue, Sioux Falls, S.D.

located in the upper left corner of the schematic drawing dated January 1, 1881. It is the only avenue that continues south with the exception of 6th Avenue to the east. (The map lacks directional orientation but the reader knows that Minnesota Avenue runs north and south, making the right hand side north.) South of 15th Street are no man-made structures except the tracks of the Chicago, St. Paul Milwaukee and Omaha Railroad. It appears to coincide with the present location of the Chicago, Northwestern Railroad. Four to five blocks have been added to the west of Township 101 North. It is interesting to note that on Minnesota Avenue between Fourth Street on the north to Fifteenth Street on the south, the cross streets have names which have since been changed to numbers.

Population of the city continued to increase as the Federal Census illustrates. In 1880, the population was 2,164, ten years later in 1890, the population was 10,177.¹ The appearance of Minnesota Avenue south of 14th Street could not be located in the photograph; however, the more developed segment north is shown in approximately 1890 or 1891. (Figure 4). Our view is from the east again as we observe the 6th Street bridge crossing the Sioux River on the left side of the picture. Minnesota Avenue can be seen occupying the rise of land about midway between the top of the bridge structure and the sky line.

Although there was little change in the population of Sioux Falls from 1890 to 1990 (10,266),² several innovations important for the future appeared. On February 23, 1900, H. C. Fenn purchased the

¹Bragstad, Sioux Falls in Retrospect, p. 1.

²Ibid.



Figure 4. Sioux Falls from the East Around 1891 Looking Toward the Ridge Occupied by Minnesota Avenue. Courtesy of Pettigrew Museum, 131 N. Duluth Avenue, Sioux Falls, South Dakota

first automobile. The speed limit was set at seven miles per hour in 1903.¹ The first gas station was located at 18th Street and Minnesota Avenue.² Cement sidewalks made their appearance. The first modern hospital was situated on South Minnesota Avenue.

Paving of streets had commenced in 1888 with the use of Sioux Falls quartzite, a stone of silica sand origin and mistakenly called Sioux Falls granite. Most of the well-traveled streets were paved using this material. Along with the paving of streets, in 1912 sewer lines were extended from 12th Street and terminated at 26th Street and Minnesota Avenue.³ Records in the City Engineer's office indicate Minnesota Avenue was paved from 4th Street to 26th Street in 1914. The paving was 48 feet curb to curb. There was a 14 foot boulevard with trees on each side. The segment extending from 26th Street to 33rd Street was completed in 1928. Widening of the avenue to 68 feet took place in 1964 and from 5th Street to 18th Street; and in 1965, 18th Street to 33rd Street. The segment from 33rd to 41st Street was completed late in the fall of 1969.⁴

What type of physical features were constructed along this ribbon of concrete? We know from the artist's drawing (Figure 3) that

¹Bragstad, Sioux Falls in Retrospect, p. 168.

²Horton, An Economic & Social Survey of Sioux Falls, South Dakota, p. 13.

³Bragstad, Sioux Falls in Retrospect, p. 20.

⁴City of Sioux Falls Engineer's Office, Sioux Falls City Hall, 224 West 9th Street, Sioux Falls, South Dakota

in 1881, 40 buildings of various size and shape were located along the avenue up to 15th Street. South of 15th Street was open prairie with the roadway heading south across the tracks of the Chicago, St. Paul Minneapolis and Omaha Railroad.

In summary, we have shown with this historical review that from 1857 to 1923, Minnesota Avenue evolved from a prairie setting to a developed urban setting. We can now observe the changes brought on by the automobile and by population growth.

CHAPTER V

COLLECTION AND TREATMENT OF DATA

The dimension of this study was clearly stated in Chapter 1-- a space-time study of twenty-seven linear blocks on Minnesota Avenue from 1923 until 1974. The method used was to observe and quantify the land use of property abutting this avenue.

Personal observation of the land use in 1974 was the initial step. This was followed by a check of a plat book to discover size of lots that front Minnesota Avenue. This was checked with city records and then Polk's City Directory for 1974. After obtaining first hand information and complete familiarity with the study area, the second step was conducted in the library. It was necessary to check the accuracy of the City Directory as this primary source was basic to the whole study. First hand knowledge of the area through long personal contact enabled this writer to check back over a great amount of the time span and thus confirm the accuracy of the data exhibited.

Information provided by the directories is as follows: each lot is designated with its address, occupant and occupation of the head of household. Land uses, other than residential are also shown. These directories are annual and date back to 1898 for Sioux Falls; while information provided by these publications is also available in city records, these books consolidate this information in an accessible manner.

Most of the pitfalls encountered were not the weakness of the source of data. They were created by vacant land and the procedure of using addresses. The following addresses can be found, for example, adjacent to one another: 820 next to 830, then 832, 834 etc; or 911 next to 925. Some of this disarray was probably due to vacant lots that were sold in halves or were left vacant to allow more space between neighbors. The directory designated any address that contained a house even though empty; this was also true of commercial structures. What was not shown was the lot that was vacant. This condition required investigation of directories both before and after to determine how it was being used.

Another item of concern was to classify lots used for parking between commercial categories of different SIC (Short Industrial Classification) codes. A simple solution was available by going to the city records for 1974 and determining the ownership of the property; however, ownership over a 60 year time span, or even 10 years is more difficult to determine.

A minor disruption was the location of corner lots that faced on the east - west streets and thus had addresses for those streets but the business was really fronting Minnesota Avenue. These were few in number and could readily be located by looking up the proper street such as Twenty-Sixth Street between Dakota Avenue and Minnesota Avenue.

The use of only six categories that were very well delineated, presented no problems in classification. It was, however, necessary to establish a policy over addresses that indicated a residence but

also stated an occupation that could be carried out from the home. Dentists, optometrists, and even a cigar maker were included in this category. These were arbitrarily established as all being commercial with full realization that in many cases they were also the personal residences of the occupants. The numbers in this category were fortunately very small.

While it was not a problem to classify landuse into its proper category, a problem did exist in classification within the commercial category. Most commercial strip activity follows definite function and is easily classified by the SIC but one may discover examples of difficulty in Appendix A with the SIC Code of 599. Such landuses as a vacated drug store used for a political candidate or an animal clinic. A single building used by three different SIC categories forced a limitation on the level of quantification within the category.

This avenue was so limited in two categories that it might have been well to use only four classes. The public-semipublic and light industrial could have been combined. The Coca-Cola Company was the only light industrial activity, and the only public-semipublic were a fire station and three churches for the whole sixty years.

Lots on Minnesota Avenue were in 44 and 50 foot frontage widths. If two residences occupied a lot and one-half, no problem of quantification existed because they were classified within the same category. Lots used for commercial purposes did present a problem because SIC titles could not accurately be divided. The

problem was in dividing the frontage accurately between SIC titles. The solution was to divide the lot equally between each SIC category occupying that lot.

The total frontage was determined from 14th Street West to 41st Street West as of 1974. Its land was allocated to one of the six categories of land use and then plotted on four or five block street segments. The reason for the block segments was to prepare drawings of the avenue in scale. Each inch on the diagram is equivalent to 200 feet on the ground. Measuring the inside of the block segments and then converting to feet presented an accurate distribution of the six major categories. The next step was to decide the interval needed to observe change. Ten year periods were selected. The initial year, 1923, was selected because of the influence of the automobile.

The first decade ended in 1933, a depression year; then followed a nine-year interval ending in 1942 (close to the beginning of World War II); 1953; 1963; and last 1974. The change or lack of change within single lots, blocks, and the whole avenue for 60 years is shown in the appendices.

The illustrative data showing the land use for the 60-year period can be found in Appendix A. The four and five block segments are divided this way:

14th Street West to 18th Street West
18th Street West to 23rd Street West
23rd Street West to 28th Street West
28th Street West to 33rd Street West
33rd Street West to 37th Street West
37th Street West to 41st Street West

Two segments are located on each page. Therefore, the first page of Appendix A will show land use categories for 14th Street West to 18th Street West for two time periods, 1923 and 1933. The first three pages will show the change over 60 years of Minnesota Avenue from 14th Street West to 18th Street West.

The distribution of land uses in Appendix A is interesting but hardly significant. Appendix A will only be useful when Appendices B, C, and D are used. Appendix B, Table 1, illustrates this point. Minnesota Avenue from 14th Street West to 18th Street West shows that in 1923 88.75% of the frontage was used for residential purposes and 1.25% for commercial. In 1974 the residential is 55.83% and the commercial is 35.43%. These figures show increase in commercial usage of 34.18% and a decline of 32.92% in the residential. The largest change in commercial is shown between 1953 and 1963--8.33% to 22.92% (a 14.59% increase). The next decade finds a commercial change of 12.51%.

Appendix B is divided into six tables, plus a final summary for Minnesota Avenue from 1923 to 1974.

Appendix C uses the SIC titles to classify commercial functions. Appendix D uses data within the commercial category. This may be used reversibly by locating the number on a segment in Appendix A, then referring to the SIC titles which are ordinarily listed in Appendix C. The SIC information from Appendices A and C may also be used in Appendix D to determine the actual per cent of land used for a specific SIC.

CHAPTER VI

ANALYSIS AND CONCLUSIONS

This study is an investigation of the changing landuse on Minnesota Avenue in Sioux Falls, South Dakota from 1923 until 1974. Categories of landuse were defined as commercial, unoccupied commercial, residential, light industrial, public-semipublic, and vacant land.

The objectives of this study focus on Minnesota Avenue to determine the answers to five questions. They were as follows:

1. Does the landuse along a traffic artery show commercial establishments that are more successful than other commercial establishments?

No conclusive evidence is shown that one type is more suitable than another. The per cent of closed commercial category is negligible for each selected time period. In 1974, 1.43 per cent of the commercial category was closed; this amount is twice the per cent of any other period studied. It would appear that commercial businesses that begin on the strip remain, or they are replaced by other proprietors in the same SIC.

A second observation is that gas stations, car dealers, both new and used, and various health professions are most prevalent. This is illustrated in the following chart of gas station frontage (SIC 554) for each segment from 1923 until 1974.

Table 1

Commercial Category for Gas Stations in Frontage Feet and
Per Cent of Commercial Land Use

Street Segment	1974	1963	1953	1942	1933	1923
14th - 18th St.	250.0' 23%	300.0' 44%	87.5' 35%	-- --	-- --	-- --
18th - 23rd St.	950.0' 34%	812.0' 40%	487.5' 35%	375.0' 65%	262.5' 75%	-- --
23rd - 28th St.	262.5' 9%	250.0' 9%	137.5' 44%	62.5' 19%	137.5' 5%	-- --
28th - 33rd St.	162.5' 5%	200.0' 6%	-- --	400.0' 12%	-- --	-- --
33rd - 37th St.	62.5' 4%	62.5' 4%	162.5' 14%	162.5' 76%	150.0' 80%	-- --
37th - 41st St.	300.0' 15%	200.0' 14%	87.5' 13%	--	--	--
TOTAL	1987.5' 16%	1874.5' 19%	962.5' 20%	1000.0' 47%	550' 48%	--

Three significant observations may be noted. First, there is a slight drop in percentage of the total commercial category between 1963 and 1974 for gas stations. Second, gas stations for commercial activity dominate between 18th Street West and 23rd Street West. Third, gas stations contributed to the major share of the commercial category in 1933 and 1942 but have declined in per cent of commercial category in 1953, 1963, and 1974. However the frontage of gas stations has continued to increase every ten years.

2. Does the existence of traffic use on a thoroughfare present incompatibility or conflict with multiple commercial landuse purposes along a thoroughfare?

Information about the problem may be found by checking the opinions of others. Edmund K. Faltermayer in his Redoing America believes once a highway is lined with stores, its usefulness as a traffic artery is diminished, that the accident rate will climb, and that the land is wasted, because strips are usually sold by the front foot irrespective of depth.¹ This practice leaves an undeveloped no-man's land between the stores and the residential areas behind. Harland Bartholomew and Associates in their Comprehensive Plan for the Greater Sioux Falls Region classify Minnesota Avenue as a major arterial. Their report continues with an explanation of a major arterial function:

Major Arterial. Streets and highways which are intended to serve as connections between the inter-city freeways and the local street system, and also provide transportation service between sub-areas of the region. Generally, a four lane roadway, preferably divided, with partial control of access. Intersections are mostly at grade with appropriate traffic controls and turning restrictions.

These conditions are not in evidence on South Minnesota Avenue. Transportation facilities are designed to save travel time and reduce accidents, costs, and congestions.

¹Edmund K. Faltermayer, Redoing America, (New York, New York: Harper & Row, 1968).

²Harland Bartholomew and Associates, City Comprehensive Plan, Sioux Falls, South Dakota, 1950.

One segment of Minnesota Avenue between 18th Street West and 26th Street West portrays some insight into this question. The west side of the avenue shows only one block, that is between 23rd Street West and 24th Street West, that has only one driveway entering Minnesota Avenue. The remaining blocks are almost completely open to entry on the avenue. The west side shows the same condition. Two city blocks, 20th Street West to 21st Street West and 24th Street West and 25th Street West are the blocks with limited access.

Observation from aerial photography (Figure 5) illustrates the condition of concrete for off-street access, parking, and ~~one-stop~~ commercial activity. Minnesota Avenue can be distinguished by the prominent swath of white projecting through the heart of the city.

3. Does the widening of a thoroughfare attract commercial establishments along the thoroughfare?

This writer says yes. Minnesota Avenue was widened in 1964. Appendix A portrays only short segments of blocks but perceptive analysis of the segments validates the answer. Between 14th Street West and 18th Street West the commercial category jumped from 22 per cent in 1963 to 35 per cent in 1974; likewise 18th Street West to 23rd Street West, moved from 74 per cent to 97 per cent of the segment; again between 23rd Street West and 28th Street West, it was 56 per cent to 86 per cent. The segment between 28th Street West and 33rd Street West remained constant, but this space was never an



Figure 5. An Aerial of Sioux Falls Illustrating the Urban Landuses.

extensive residential segment. The transition was direct from vacant or agriculture land to commercial. The south end of the strip from 33rd to 41st experienced a similiar transformation.

The unfortunate circumstance, if this writer's answer is true, is that main arterials are widened to increase traffic flow but in reality, the opposite occurs.

4. Does the commercial activity along thoroughfares create urban blight or does this commercial activity create a condition of urban growth?

A comparison of Figure 1 in Chapter I with Figure 5 in Chapter VI shows greatly increased activity on Minnesota Avenue in the latter figure. Trees and houses have disappeared. Commercial establishments dominate. Dr. C. A. Doxiades, who created the word dynapolis, meaning dynamic growth, believes the concept that growth per se is good and that linear growth is best.¹

In rebuttal, Edmund Faltermayer compares modern Europe with the United States--beauty vs. bill boards, alleys, hamburger stands, gas stations, discount houses, and all the other "over cinder block monstrosities of roadside commerce."² Free standing stores tend to be gaudy to attract attention.³

¹V. Gruen, Center for the Urban Environment Survival of the Cities, (New York & Cincinnati: Van Nostrand Reinhold Company, 1973), p. 181.

²Faltermayer, Redoing America, p. 119.

³Faltermayer, Redoing America, p. 33-34.

Commercial expansion does alter the physical space. The consumers have determined the answer because without them the commercial strip could not exist.

5. Is the landuse along traffic thoroughfares controlled by a competing market or is the landuse along traffic thoroughfares controlled by political-economic forces?

In 1927, H.B. 53 State Enabling Act authorized municipal corporations to regulate and restrict use of land and regulate height and volume of structure. The Sioux Falls City Commission and Mayor Thomas McKinnon took advantage of the authority granted by the State Legislature and passed a resolution appointing a zoning commission of nine members. H.B. 53 defined zoning as the "exercise of such foresight as will promote the orderly and sightly development of a city and its environs along natural lines with due regard to health, amenity and convenience, and for its commercial and industrial advancement."¹

Ordinance 1010, June 22, 1928, was the first zoning ordinance administered by the City Commission along with a Board of Adjustment.² Basic tenets were control of landuse, location, and volume of structures.

¹Bragstad, Sioux Falls in Retrospect, p. 159.

²Ibid.

Twenty years later, Ordinance 1520, March 15, 1948, created a City Plan Commission in order to prepare a master comprehensive city plan to control the physical development of the city.¹

On December 20, 1948, one City Commission contracted Harland Bartholomew and Associates, Planning Engineers of St. Louis, Missouri, to develop a comprehensive plan for Sioux Falls. Their reports were to serve as a guide for the city to prepare planning and zoning regulations. Harland Bartholomew & Associates presented their first Comprehensive Plan in November of 1950. This report pointed out that Minnesota Avenue was paved at a width wider than necessary for two moving lanes but not wide enough for four moving lanes. The right-of-way of 80 feet was also noted in this report along with the problem of no continuous street through Sioux Falls in any direction.²

This study recommended that Minnesota Avenue constitute a main north-south route proceeding in a straight line in both directions until well out of the city. It also showed the complicated zoning of Minnesota Avenue. The avenue from 14th Street West to halfway between 17th Street West and 18th Street West was two-family dwellings; then commercial to 21st Street; then light industrial to 41st Street West.

Harland Bartholomew's work was an initial step in the field of planning and a great many of the recommendations made by his firm

¹Bragstad, Sioux Falls in Retrospect, p. 159.

²Bartholomew, p. 26-27.

have been carried out. His projections in demography and other areas were extremely accurate, but his recommendations concerning Minnesota Avenue were not realized, thereby exposing the avenue today to a dual purpose role.

The answer to question 5 appears to this writer to be found by looking at what has taken place on Minnesota Avenue over 60 years. Observe the following two charts that summarize all of the major findings of this study.

Table 2

Per Cent of Land Use by Category - Minnesota Avenue from 14th Street to 41st Street from 1923 to 1974.

Year	Commercial	Commercial Unoccupied	Residential	Vacant	Public	Light Industrial
1974	73.55%	1.43%	14.95%	8.5%	.45%	1.12%
1963	58.90%	.23%	22.47%	16.83%	.45%	1.12%
1953	29.45%	.75%	33.44%	33.51%	1.73%	1.12%
1942	12.78%	0.00%	34.94%	49.96%	1.20%	1.12%
1933	6.84%	0.00%	31.63%	60.33%	1.20%	0.00%
1923	1.20%	0.00%	25.70%	72.80%	.30%	0.00%

Table 3

Per Cent of Land Use by Category for Four and Five Block
Segments for Six Points in the Time 1923 to 1974.

Street	Commercial	Commercial Unoccupied	Residential	Vacant	Public	Lt. Ind.
14th-18th	13.40%	.56%	81.67%	3.26%	1.11%	0.0%
18th-23rd	43.26%	.22%	13.11%	39.77%	3.64%	0.0%
23rd-28th	30.54%	--	35.52%	33.94%	--	--
28th-33rd	33.33%	.43%	18.07%	44.06%	.43%	3.68%
33rd-37th	35.13%	.63%	3.67%	60.57%	--	--
37th-41st	28.39%	.61%	1.30%	69.70%	--	--

Average Percent for Six Segments for Six Time Periods:

30.68%	.41%	25.56%	41.88%	.86%	.61%
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The evidence presented here would indicate that the American free enterprise system has been at work and that land use is based on the competing market. Therefore commercial activity is the winner. Right or wrong, the principles of our economic system are very obvious by what has happened. As stated previously in this paper, once a highway is lined with stores, its usefulness as a traffic artery is diminished, but on the other side of the coin, its economic growth is enhanced. Development in response to economic need may result in disorder to city planners but still function to the satisfaction of the community. The planner is extremely important in new areas but is the victim in already developed areas.

In summary, it is recommended that more scientific studies be made that encompass a broader scope. Planning can only be relevant when reality is understood. Such planning must include what exists, what is possible, and what can be. This study has described what exists and hopefully given the reader a sound approach for future planning.

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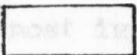
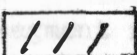
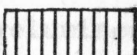

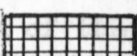

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APPENDIX A

Land use legend for six categories

Commercial	
Commercial (Unoccupied)	
Vacant or Agriculture Purpose	
Residential	
Light Industrial	
Public & Semi-Public	

Scale for Appendix A

One inch is equivalent to two hundred feet 1" : 200'

Numerical Values

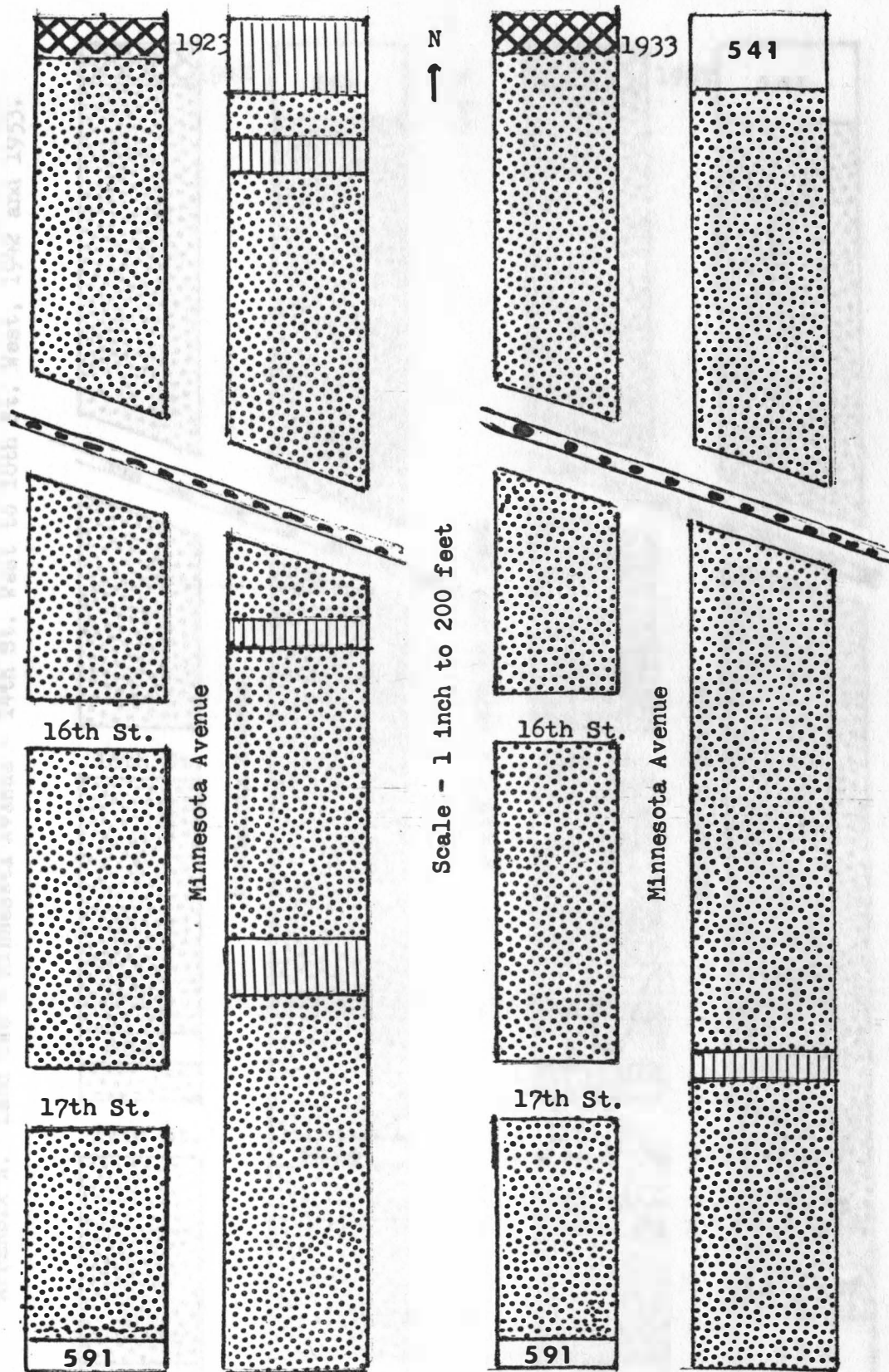
Standard Industrial Classification titles can be located in Appendix C and other Appendices.

APPENDIX A - Continued
Supplementary Explanation

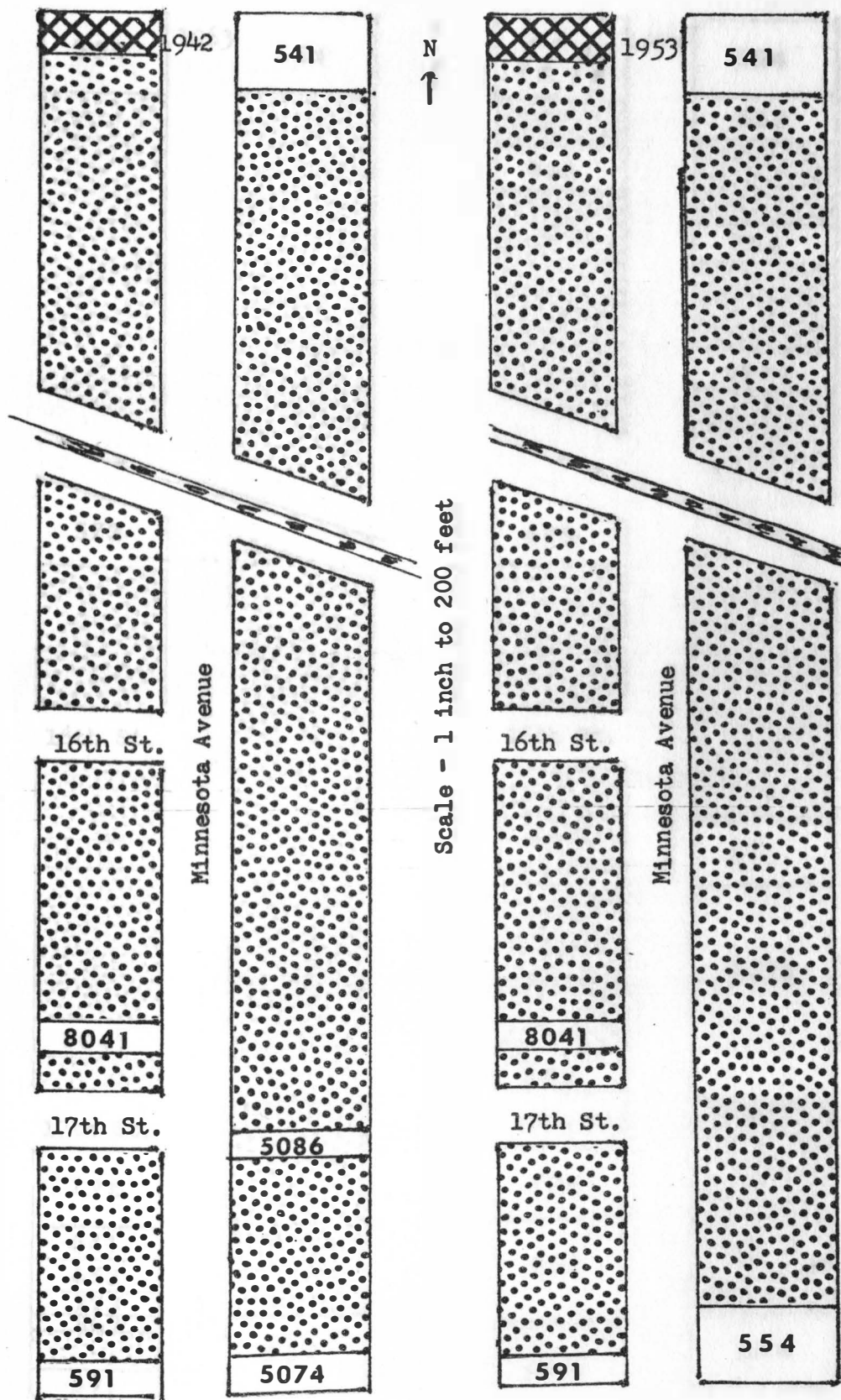
The following maps in Appendix A are the most important ingredient for this study. The content of six segment maps of Minnesota Avenue for six time periods, appeared too voluminous for effective use in the body of the text. Separation from Appendices B, C, and D would present problems of convenient utilization of the land use maps. A geographer's main tool is the map, what the map contains, and how the map is presented. Thus, the decision was made to place the most important part of the study, the maps, in the Appendix for efficient and convenient access.

The maps commence with two segments of Minnesota Avenue from 14th Street West to 18th Street West for 1923 and 1933 followed by the same segment for 1942 and 1953, and 1963 and 1974. The only exception to this procedure of one segment for six time periods is the segment 28th Street West to 33rd Street West for the entire sixty year study. Separation was made at 31st Street West caused by the length of the five block segment. Therefore, the segment 28th Street West to 31st Street West will be followed by the short segment 31st Street West to 33rd Street West. The slight alteration was necessary because of the length of this segment on a page and the desire to remain with the same scale throughout the body of maps.

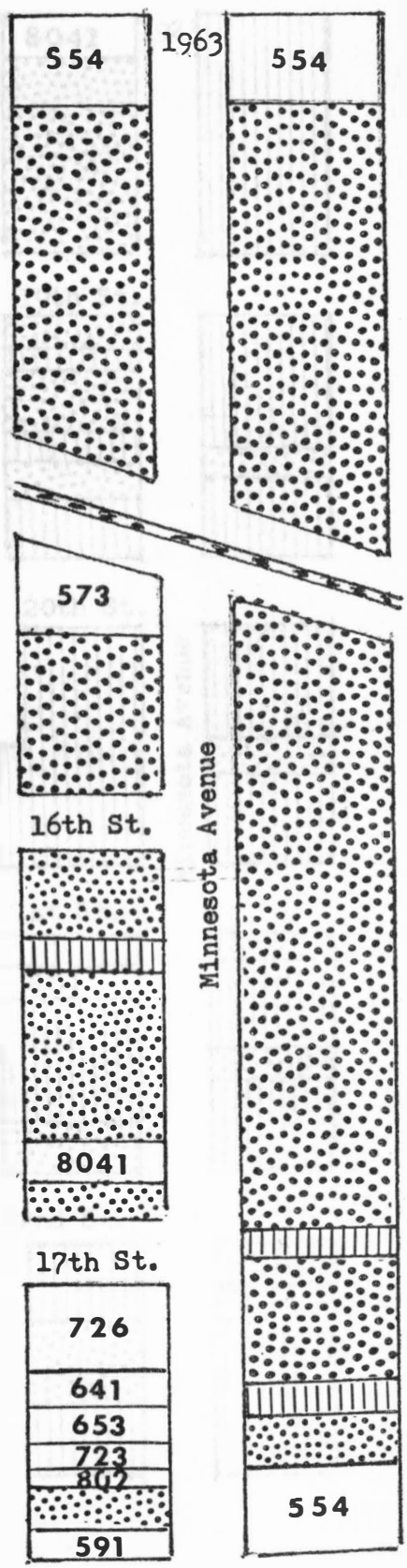
APPENDIX A. Land Use - Minnesota Avenue - 14th St. West to 18th St. West, 1923 and 1933



APPENDIX A. Land Use - Minnesota Avenue - 14th St. West to 18th St. West, 1942 and 1953.

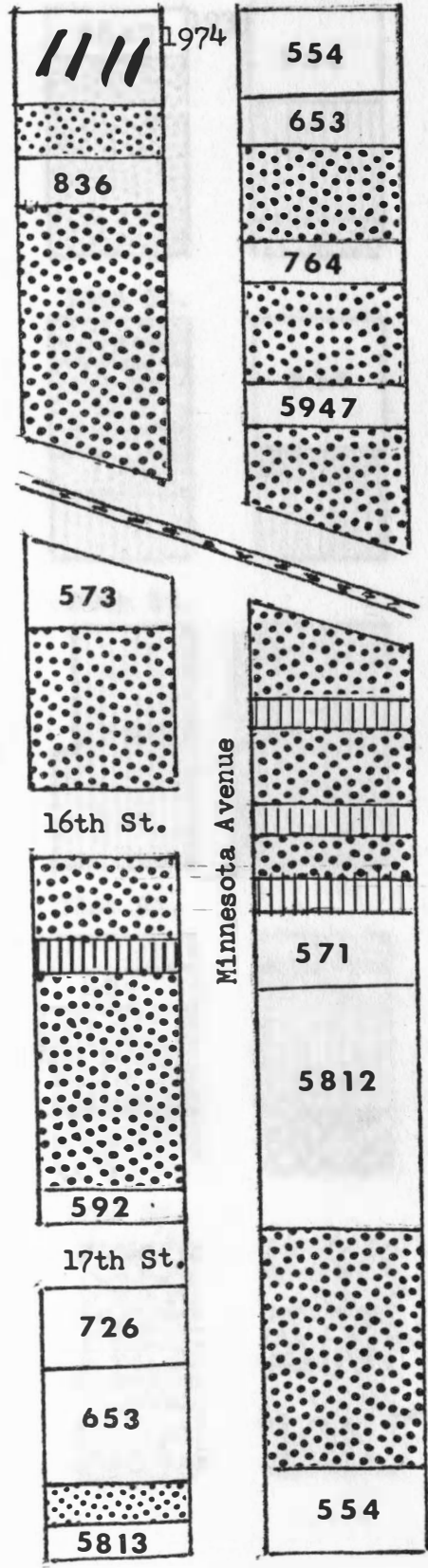


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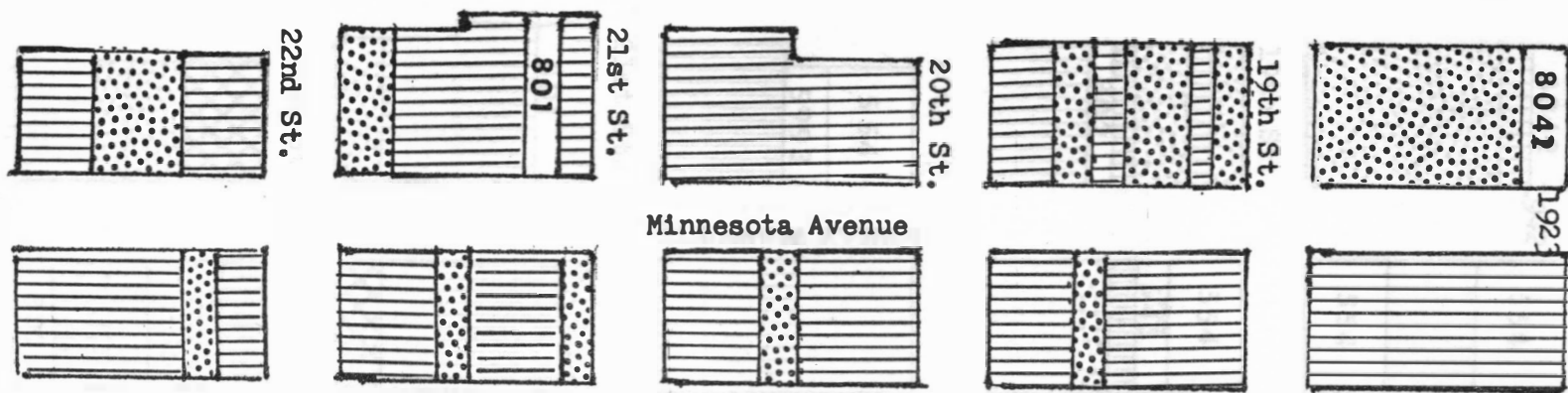


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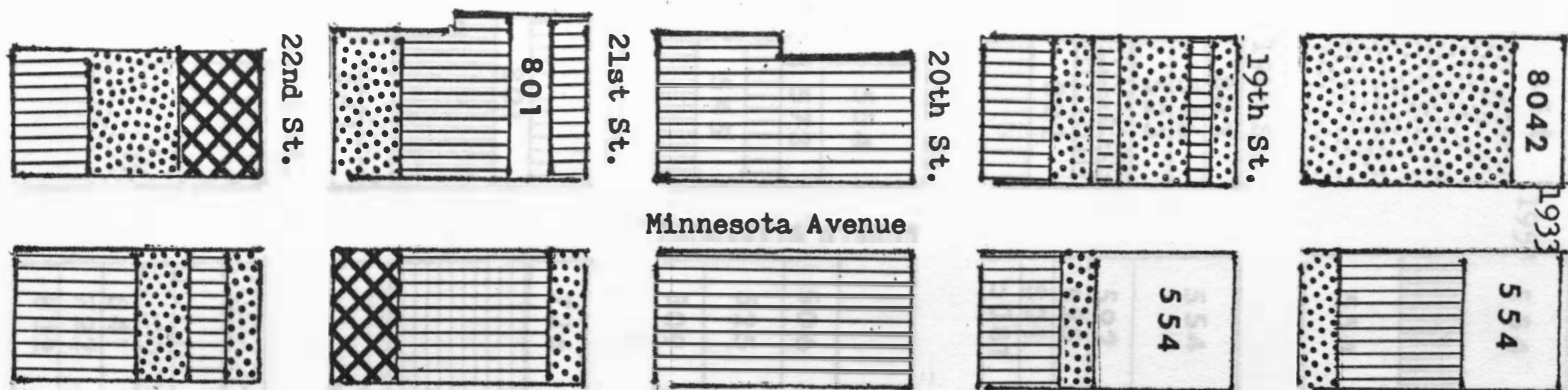


APPENDIX A. - Land Use - Minnesota Avenue - 18th St. West to 23rd St. West, 1923 and 1933.

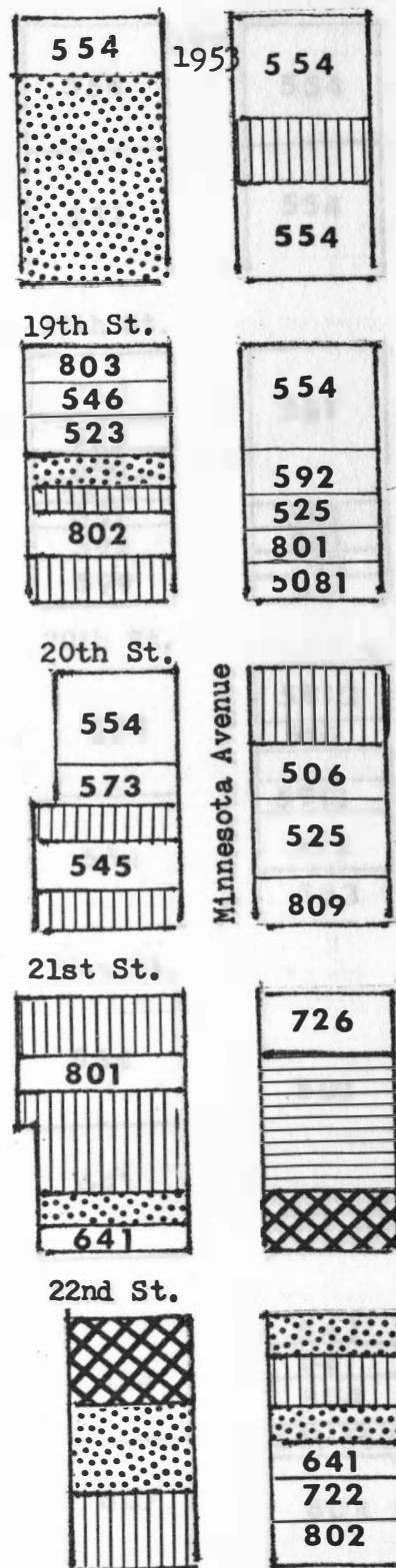
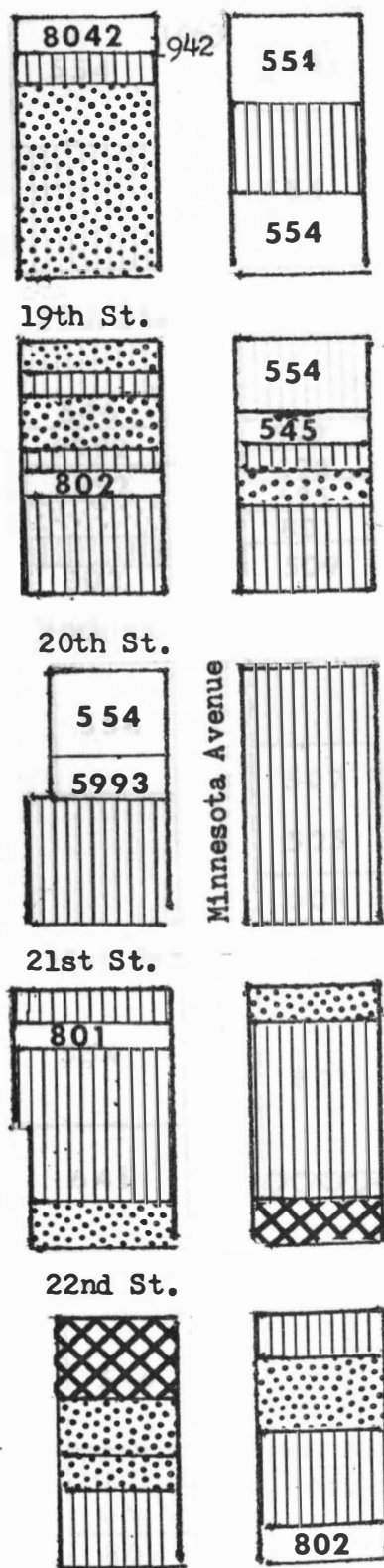


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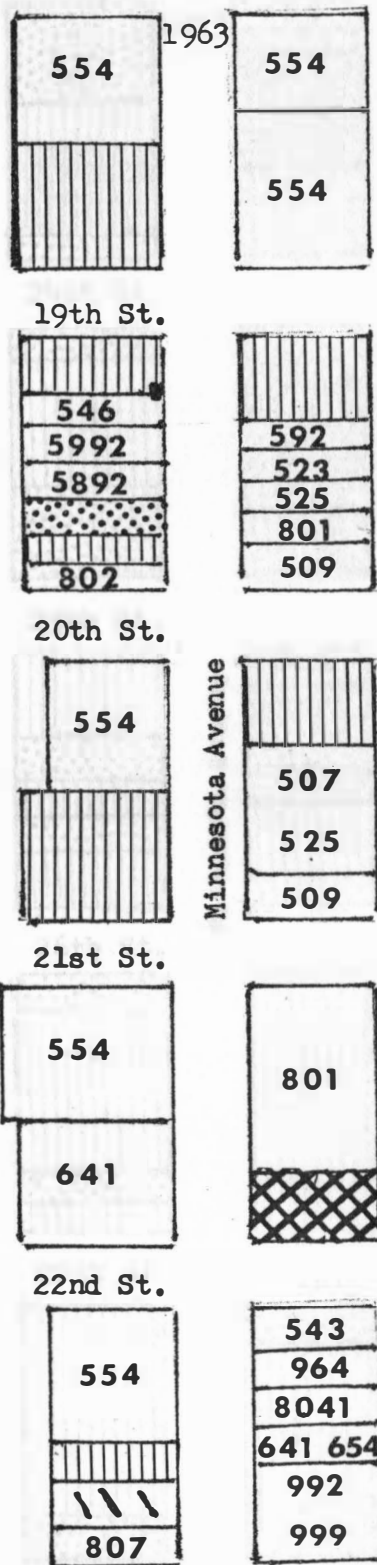
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APPENDIX A. - Land Use - Minnesota Avenue - 18th St. West, 1942 and 1953

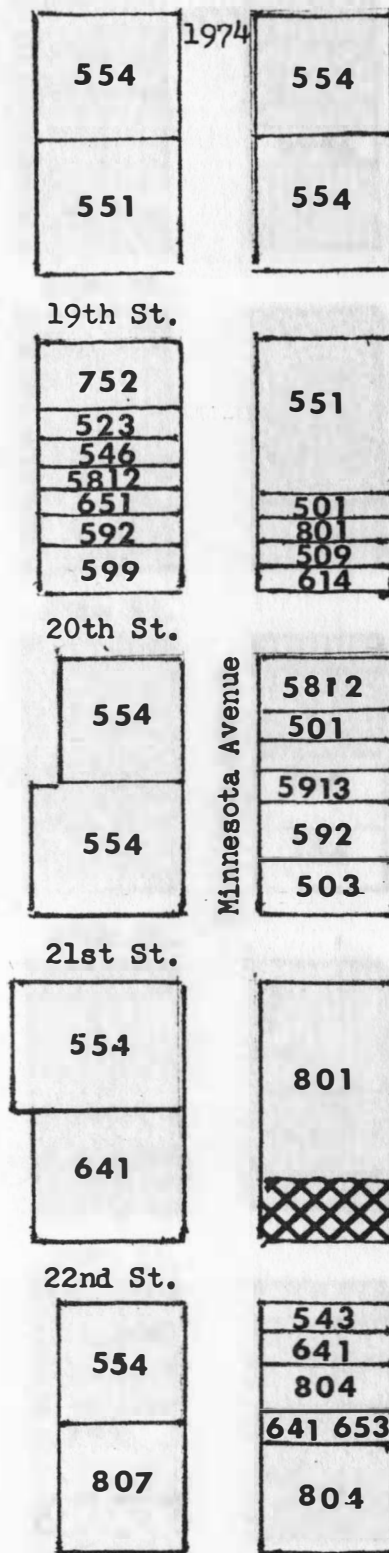


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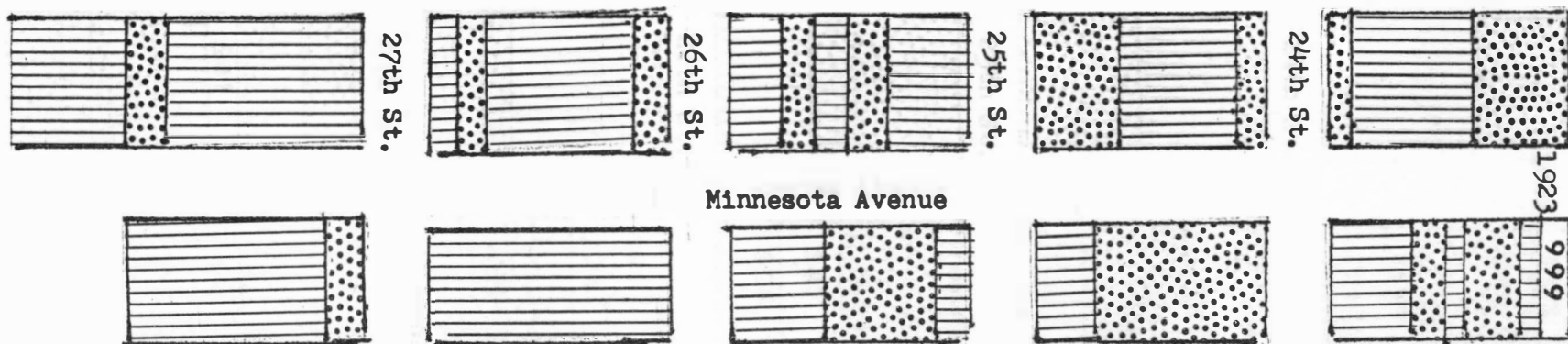


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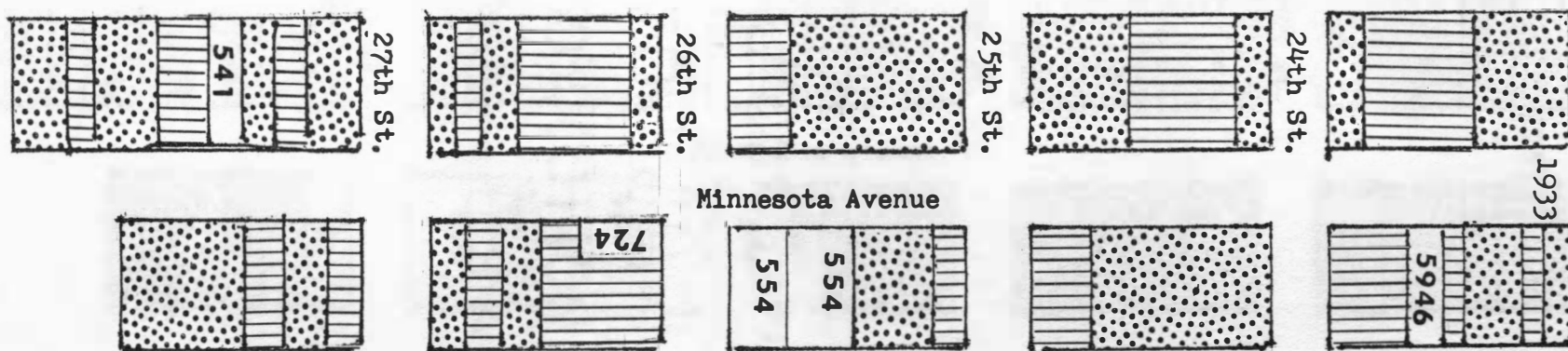
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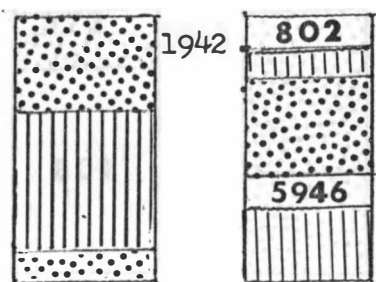
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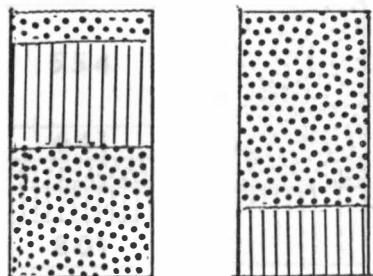
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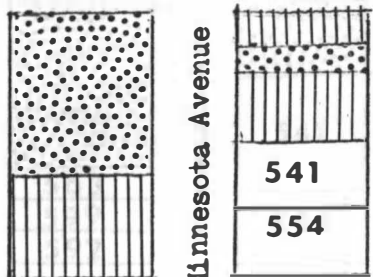
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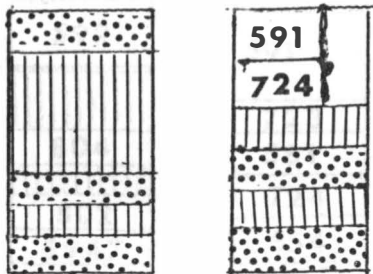
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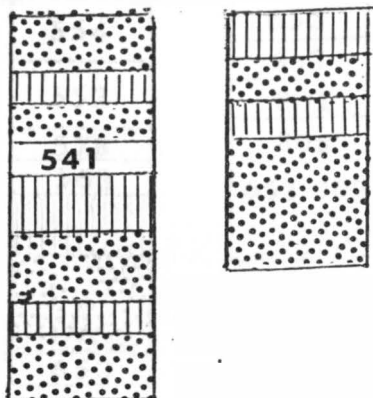
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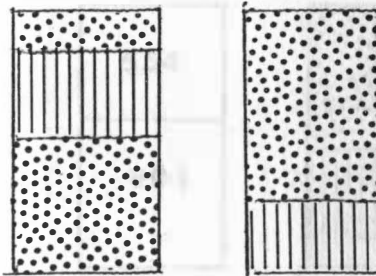
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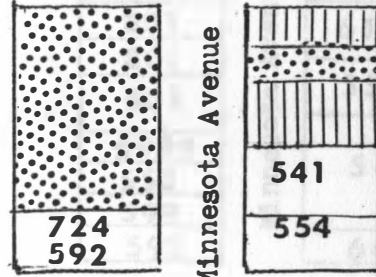
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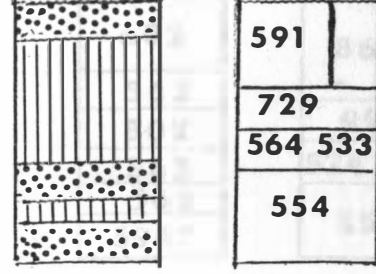
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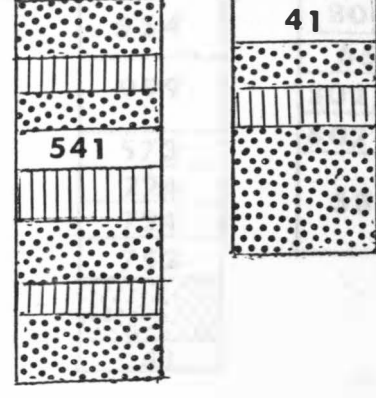
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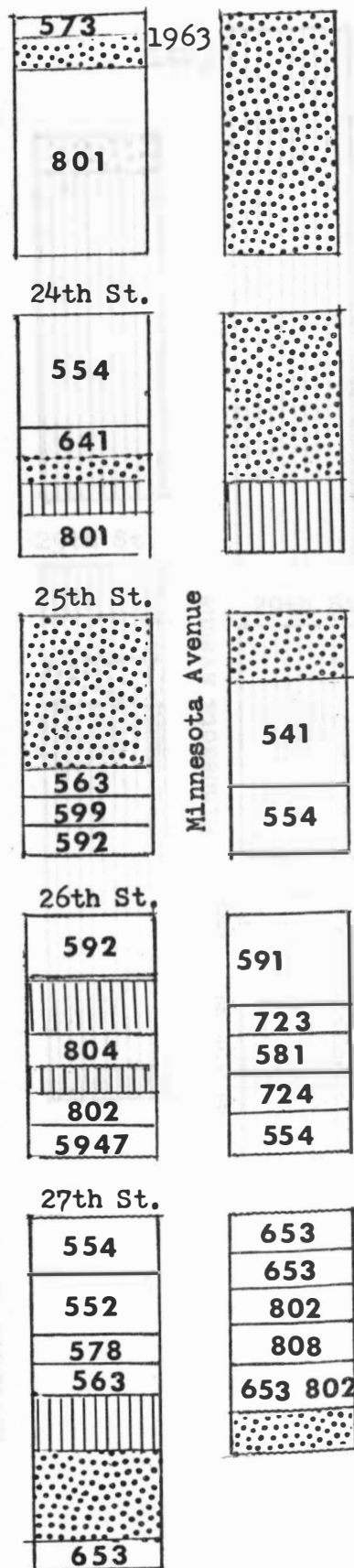
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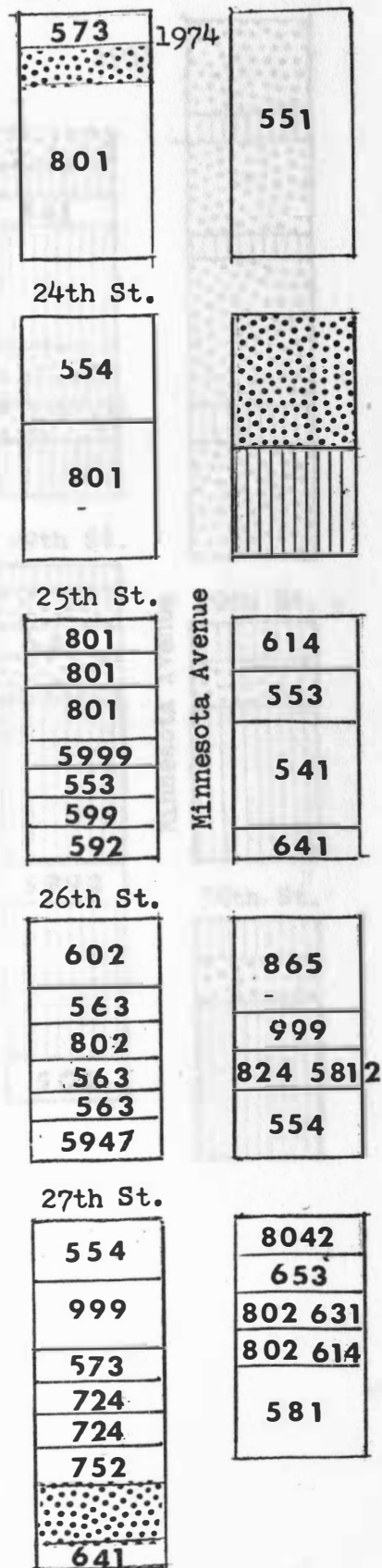
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APPENDIX A. Land Use - Minnesota Avenue - 23rd St. West to 28th St. West, 1963 and 1974

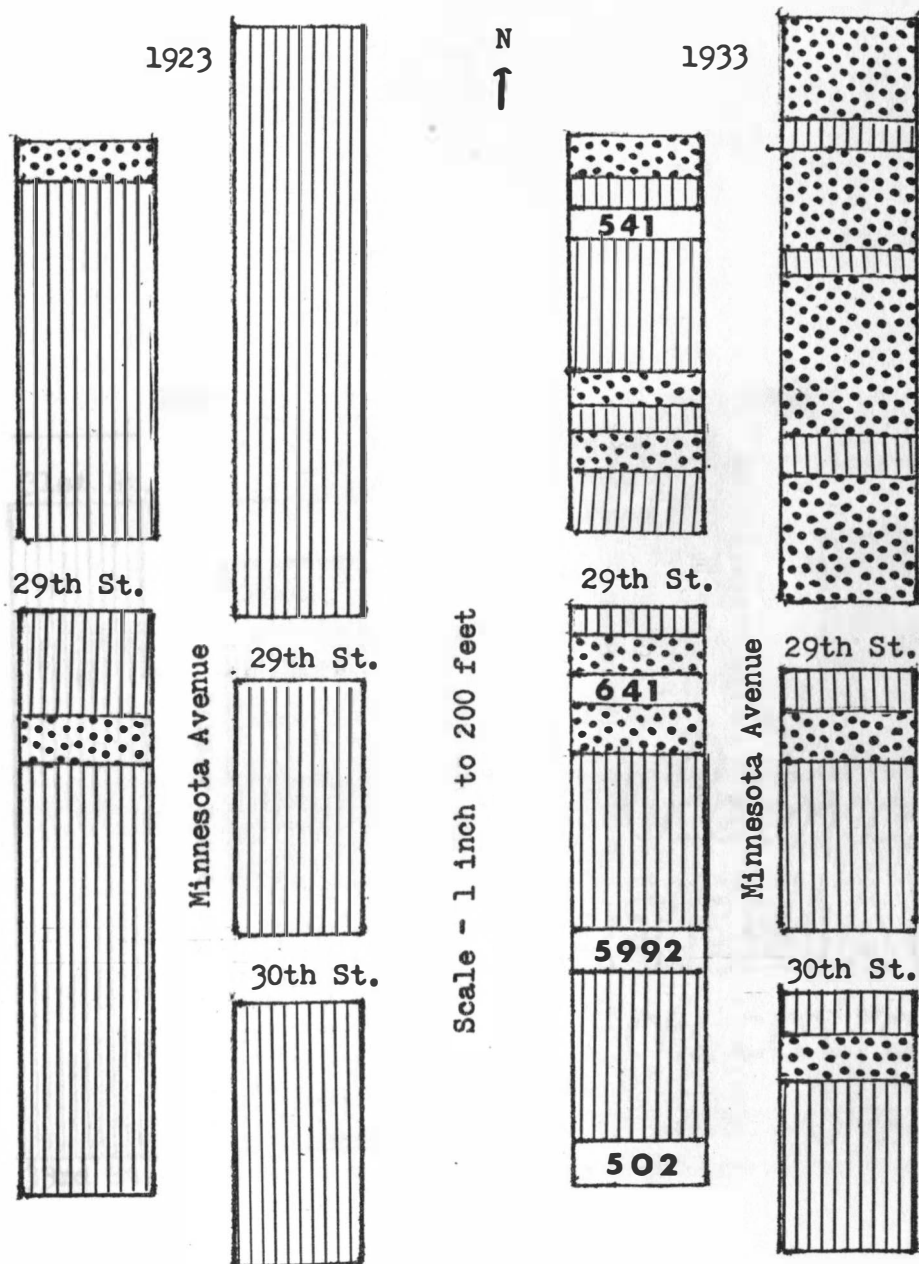


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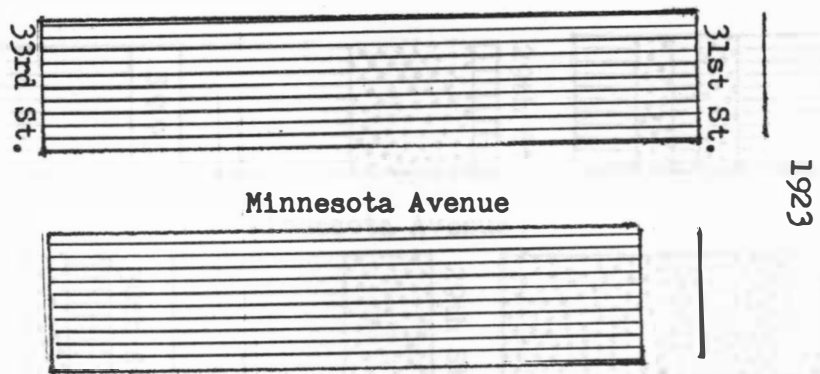
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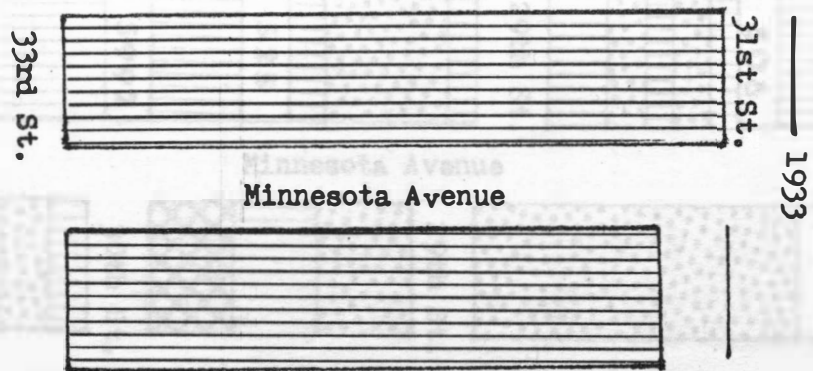


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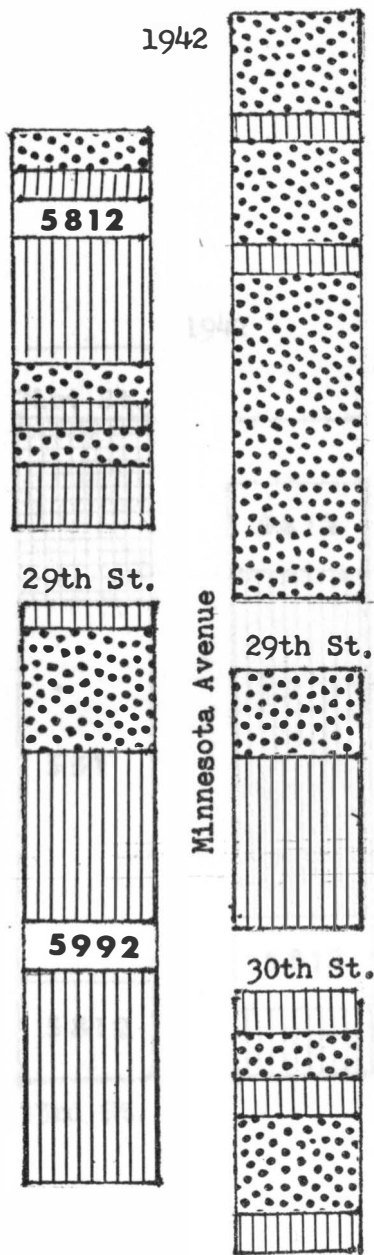


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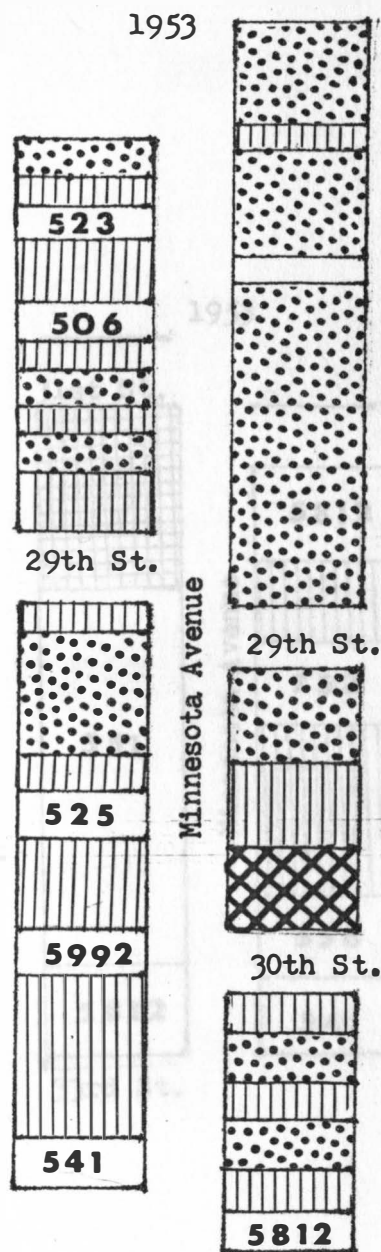


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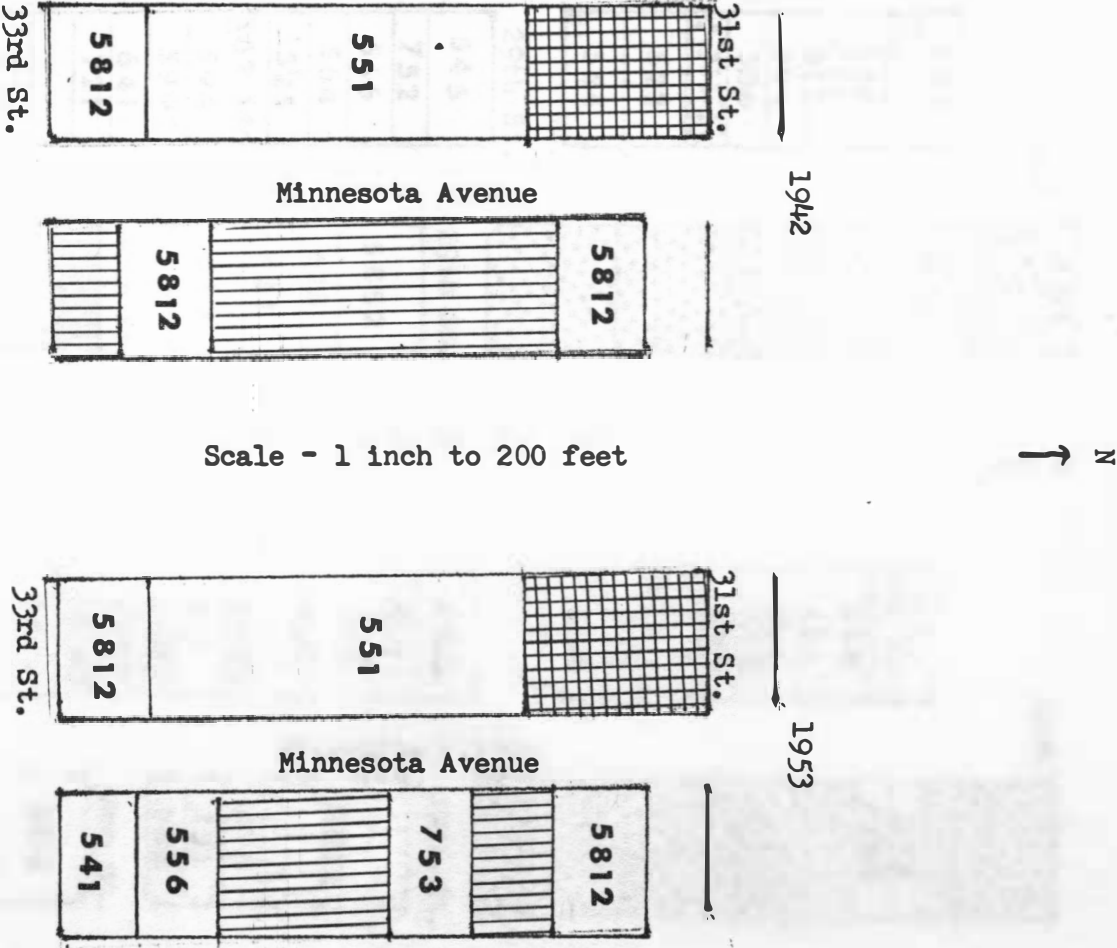


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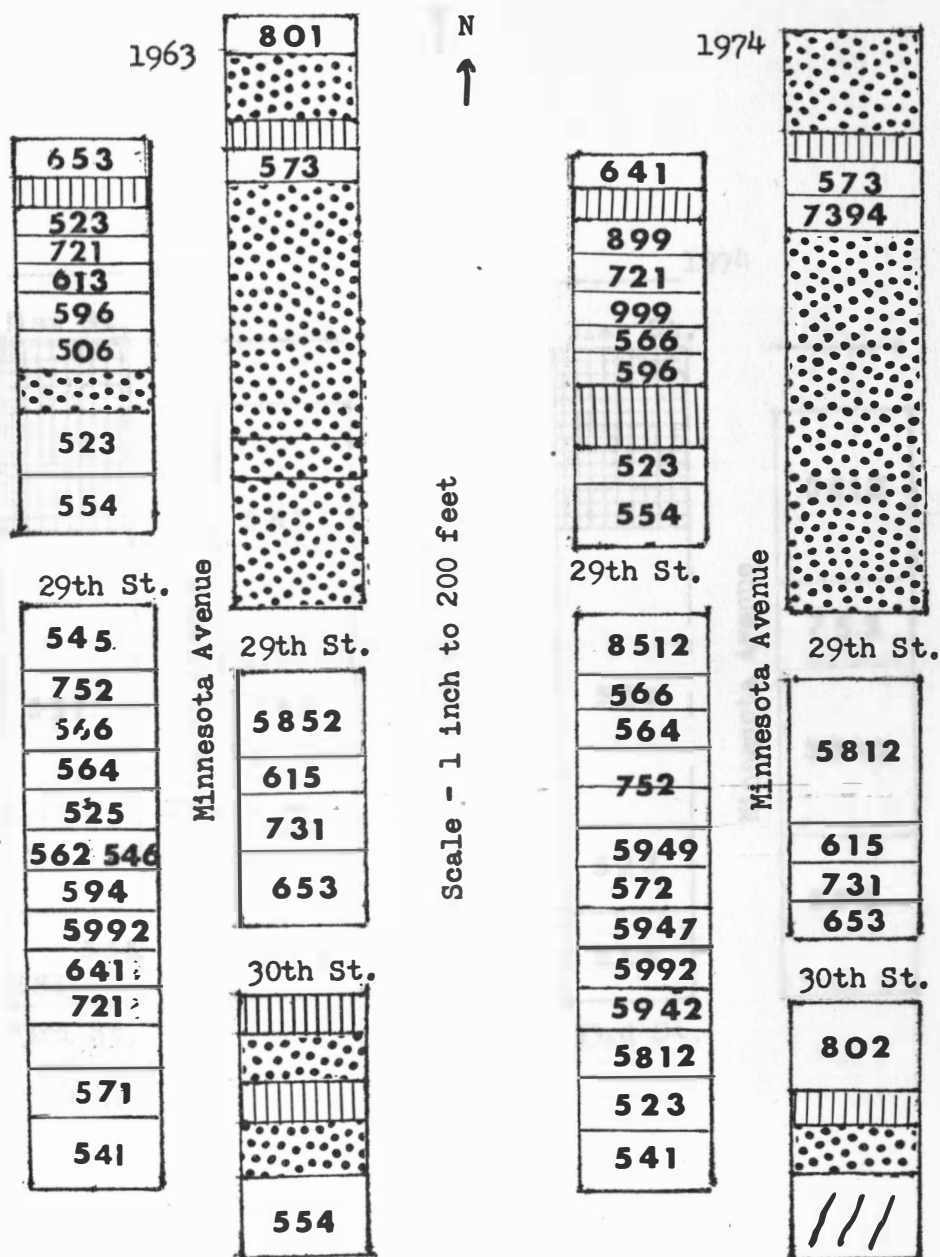
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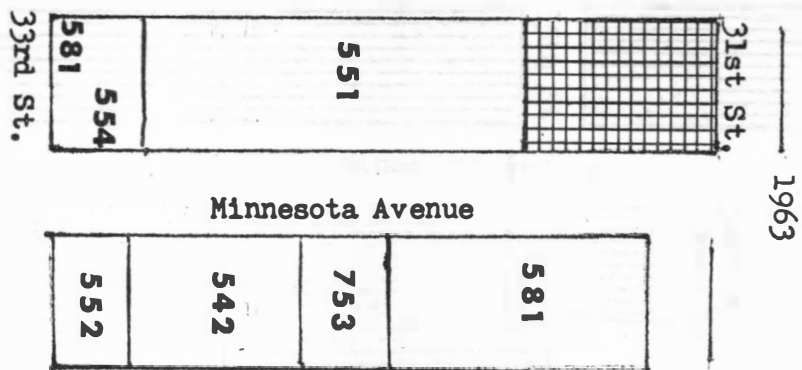
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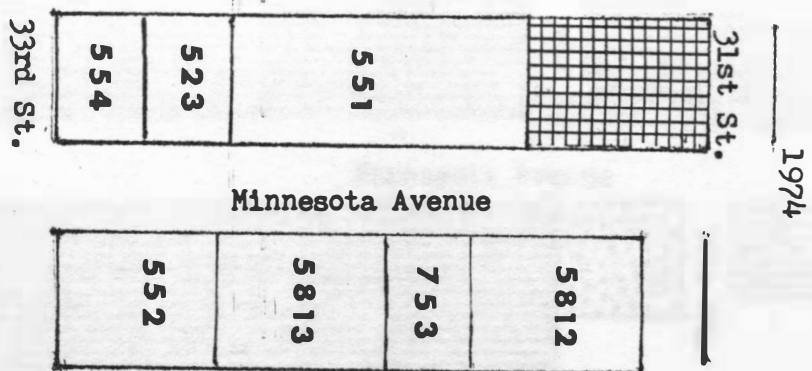
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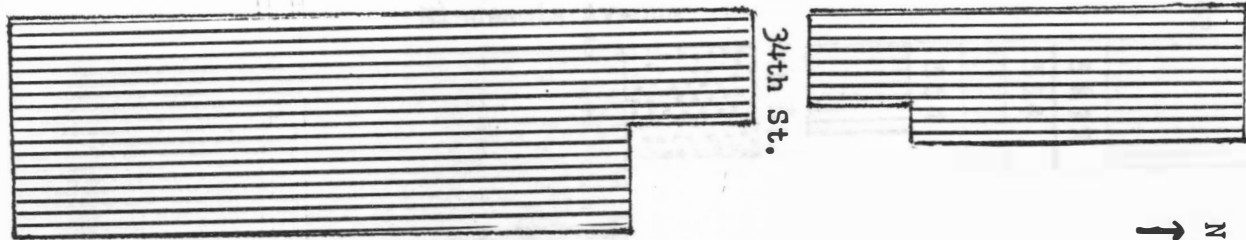
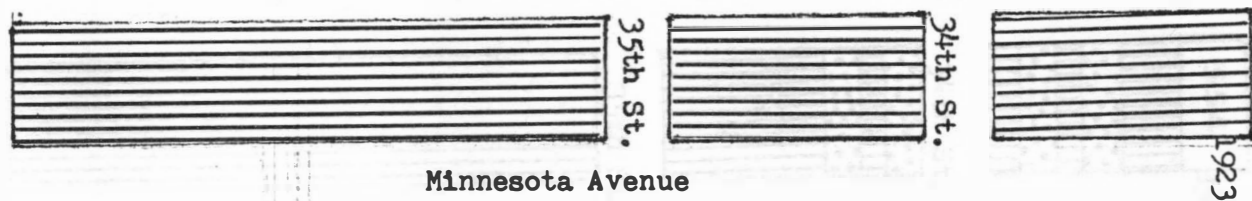
APPENDIX A. Land Use - Minnesota Avenue - 31st St. West to 33rd St. West, 1963 and 1974.



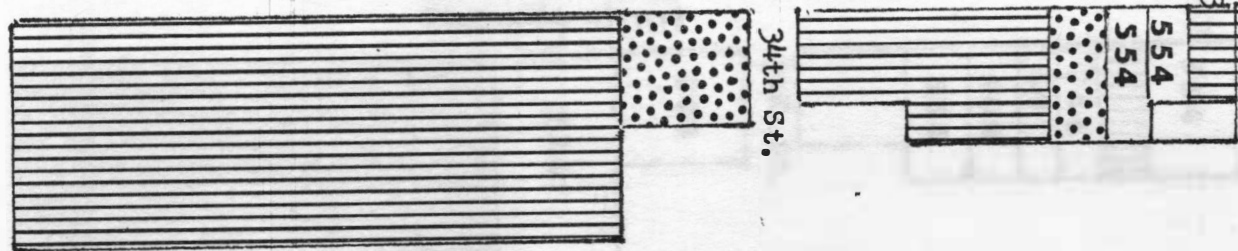
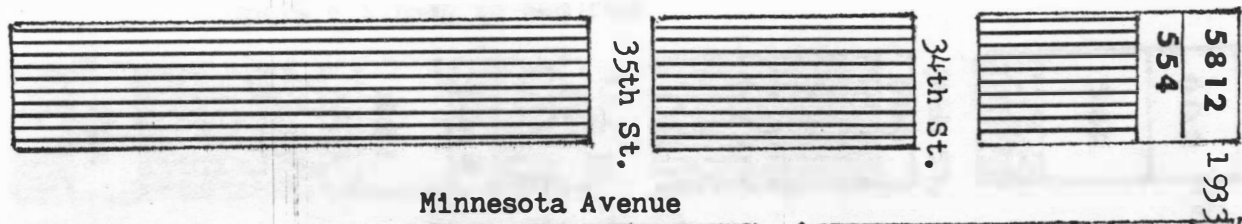
Scale - 1 inch to 200 feet



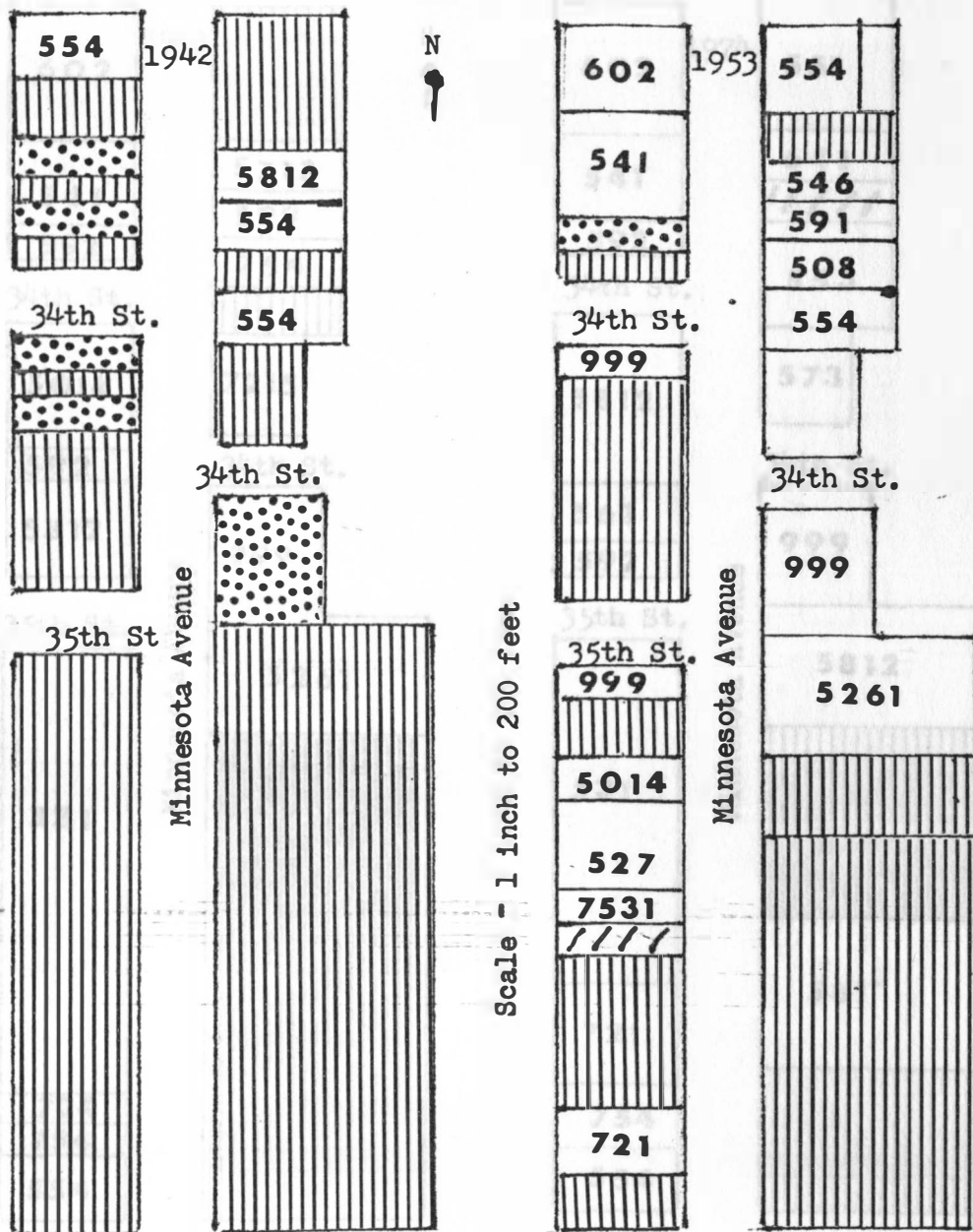
APPENDIX A. Land Use - Minnesota Avenue - 33rd St. West to 37th St. West, 1923 and 1933.



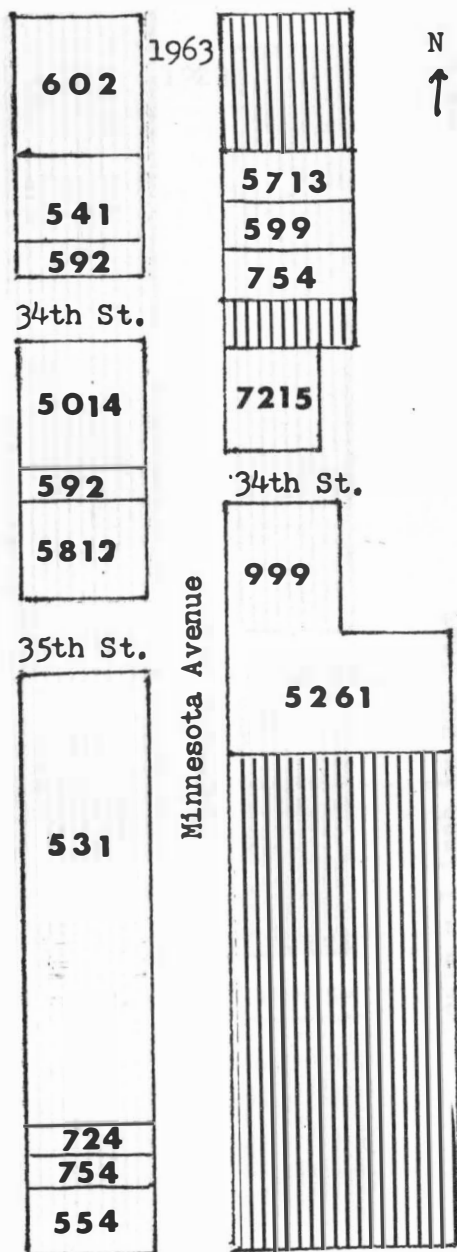
Scale - 1 inch to 200 feet



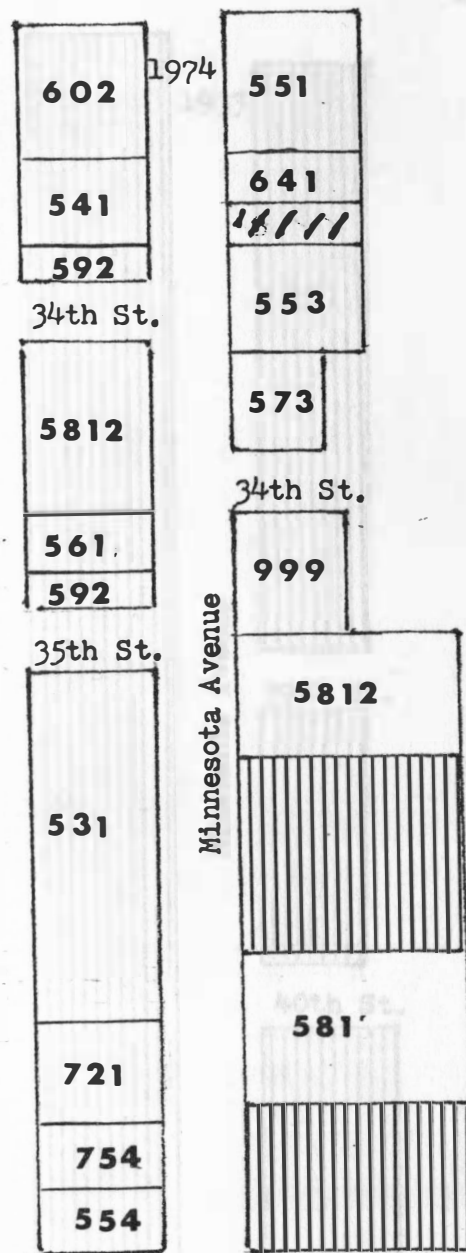
APPENDIX A. Land Use - Minnesota Avenue - 33rd St. West to 37th St. West, 1942 and 1953.



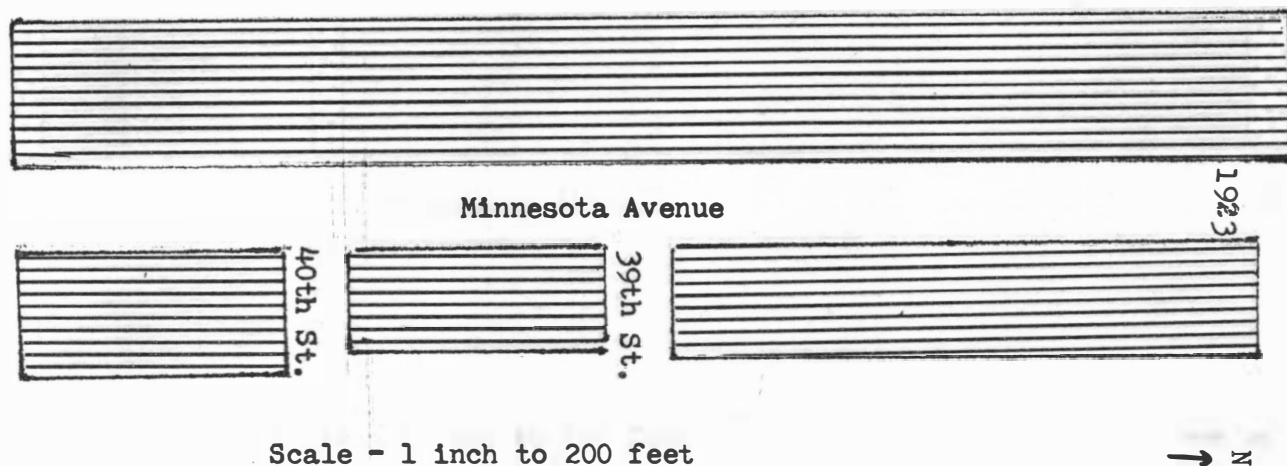
APPENDIX A. Land Use - Minnesota Avenue - 33rd St. West to 37th St. West, 1963 and 1974.



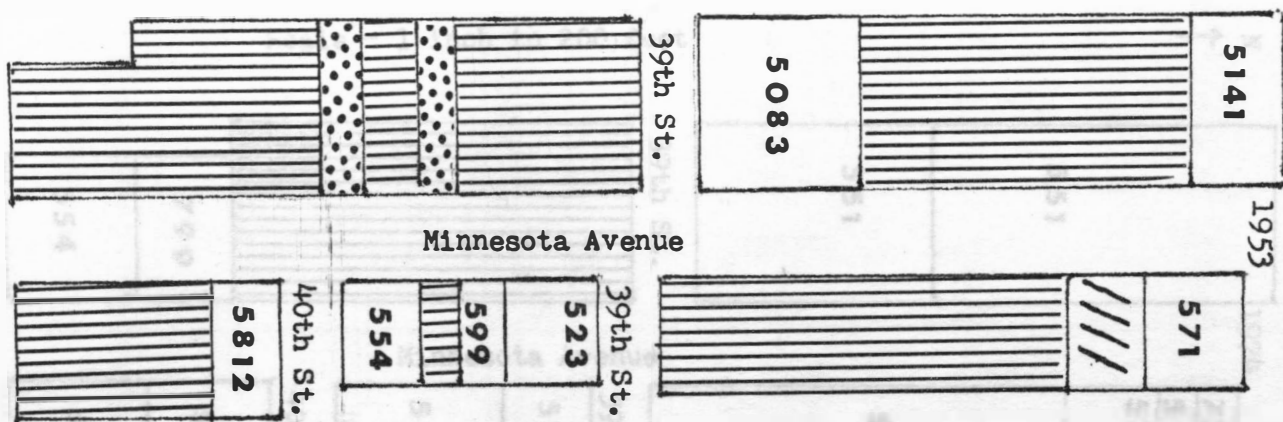
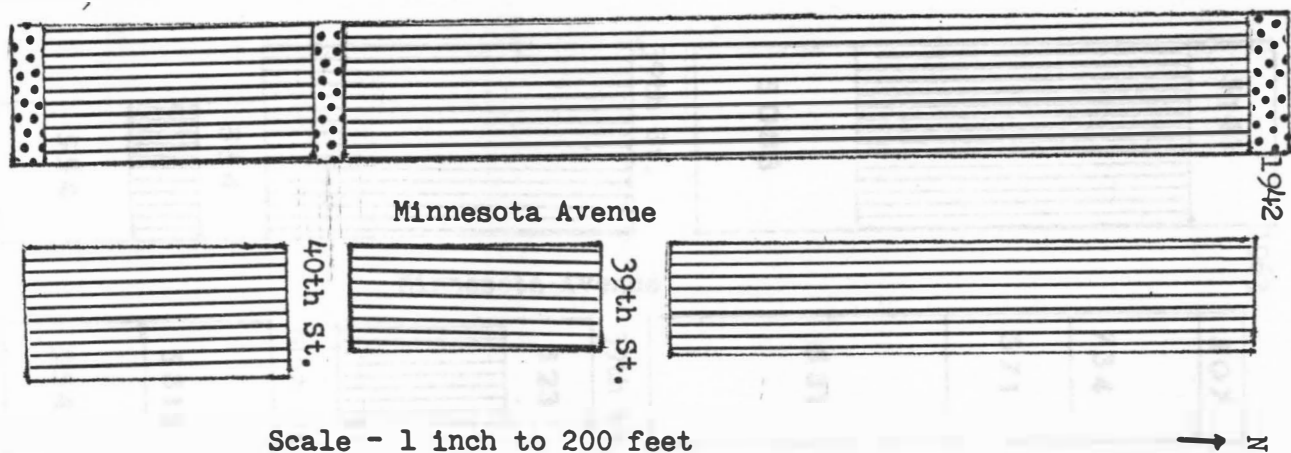
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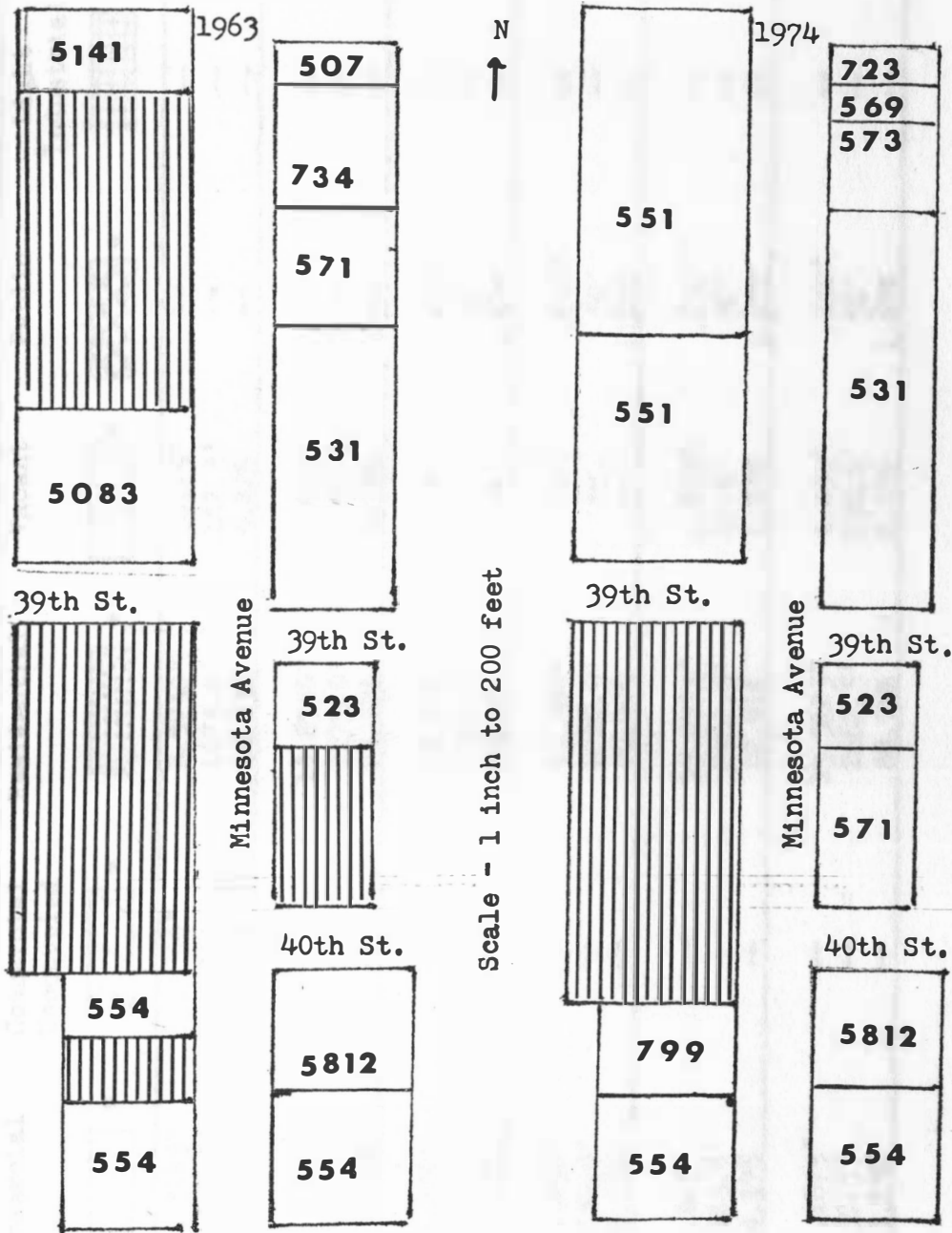
APPENDIX A. Land Use - Minnesota Avenue - 37th St. West to 41st St. West, 1923 and 1933.



APPENDIX A. Land Use - Minnesota Avenue - 37th St. West to 41st St. West, 1942 and 1953.


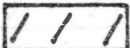






APPENDIX A. Land Use - Minnesota Avenue - 37th St. West to 41st St. West, 1963 and 1974.



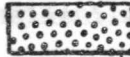





APPENDIX B

Table 1. Minnesota Avenue 14th Street to 18th Street from 1923 to 1974.

Year	Total	Commercial	Commercial Unoccupied	Residential	Vacant	Public	Light Industrial
		 *	 *	 *	 *	 *	 *
1974	15" 3000' 100%	5.3125" 1062.5' 35.43%	.5000" 100' 3.33%	8.3750" 1675.0' 55.83%	.8125" 162.5' 5.42%	-- -- --	-- -- --
1963	15" 3000' 100%	3.4375" 687.5' 22.92%	-- -- --	10.8750" 2175.0' 75.50%	.6875" 1137.5' 4.58%	-- -- --	-- -- --
1953	15" 3000' 100%	1.250" 250.0' 8.33%	-- -- --	13.500" 2700.0' 90.00%	-- -- --	.250" 50' 1.67%	-- -- --
1942	15" 3000' 100%	1.250" 250.0' 8.33%	-- -- --	13.500" 2700.0' 90.00%	-- -- --	.250" 50' 1.67%	-- -- --
1933	15" 3000' 100%	.625" 125.0' 4.17%	-- -- --	13.9375" 2787.5' 92.91%	.1875" 37.5' 1.25%	.250" 50' 1.67%	-- -- --
1923	15" 3000' 100%	.1875" 37.5' 1.25%	-- -- --	13.3125" 2662.5' 88.75%	1.250" 250.0' 8.33%	.250" 50' 1.67%	-- -- --

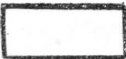




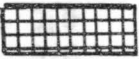
APPENDIX B - Table 1 -- Continued

Year	Total	Commercial	Commercial Unoccupied	Residential	Vacant	Public	Light Industrial
		 *	 *	 *	 *	 *	 *
Total							
Over	90,000"	12.0625"	.5000"	73.5000"	2.9375"	1.0"	0.0
Sixty	18,000	2412.5'	100'	14,700.0'	587.5'	200'	0.0
Years	100%	13.40%	.56%	81.67%	3.26%	1.11%	100.0%
Total							
1974		35.47%	3.33%	55.83%	5.42%	--	--
1963		22.92%	--	75.50%	4.58%	--	--
1953		8.33%	--	90.00%	--	1.67%	--
1942		8.33%	--	90.00%	--	1.67%	--
1933		4.17%	--	92.91%	1.25%	1.67%	--
1923		1.25%	--	88.75%	8.33%	1.67%	--







*As illustrated in Appendix A

APPENDIX B

Table 2. Minnesota Avenue 18th Street to 23rd Street from 1923 to 1974.

Year	Total	Commercial	Commercial Unoccupied	Residential	Vacant	Public	Light Industrial
		 *	 *	 *	 *	 *	 *
1974	13.75" 2750' 100.0%	13.3750" 2675.0' 97.27%	-- -- --	-- -- --	-- -- --	.3750 " 75' 2.73%	-- -- --
1963	13.75" 2750' 100.0%	10.1875 " 2037.5' 74.09%	.1875" 37.5' 1.36%	.1875 " 37.5' 1.36%	2.8125 " 562.5 ' 20.49%	.3750 " 75' 2.73	-- -- --
1953	13.75" 2750' 100.0%	6.875 " 1375.0' 50.0%	-- -- --	2.125" 425.0' 15.44%	4.000" 800' 29.09%	.75 " 150' 5.46	-- -- --
1942	13.75' 2750' 100.0%	2.875" 575' 20.90%	-- -- --	2.6875" 537.5' 19.55	7.4375" 1487.5' 54.09	.75" 150' 5.46	-- -- --
1933	13.75" 2750' 100.0%	1.75 " 350' 12.72%	-- -- --	2.50" 500' 18.18%	8.75 " 1750' 63.64%	.75 " 150' 5.46	-- -- --
1923	13.75" 2750' 100.0%	.625" 125' 4.55%	-- -- --	3.3125 " 662.5' 24.09%	9.8125 " 1962.5' 71.36%	-- -- --	-- -- --




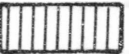


APPENDIX B - Table 2 -- Continued

Year	Total	Commercial	Commercial Unoccupied	Residential	Vacant	Public	Light Industrial
		 *	 *	 *	 *	 *	 *
Total	82.5"	35.6875"	.1875"	10.8125"	32.8125"	3.0"	0.0
Over	16,500'	7,137.5'	37.5'	2,162.5'	6,562.5'	600'	0.0
Sixty Years	100.0%	43.26%	.22%	13.11%	39.77%	3.64%	
Total							
1974		97.27%	--	--	--	2.73%	--
1963		74.09%	1.36%	1.36%	20.46%	2.73%	--
1953		50.00%	--	15.45%	29.09%	5.46%	--
1942		20.90%	--	19.55%	54.09%	5.46%	--
1933		12.72%	--	18.18%	63.64%	5.46%	--
1923		4.55%	--	24.09%	71.36%	--	--


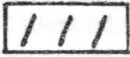

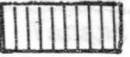


*As illustrated in Appendix A

APPENDIX B

Table 3. Minnesota Avenue 23rd Street to 28th Street from 1923 to 1974.

Year	Total	Commercial	Commercial Unoccupied	Residential	Vacant	Public	Light Industrial
		 *	 *	 *	 *	 *	 *
1974	13.8125" 2762.5' 100.0%	11.9375" 2387.5' 86.43%	-- -- --	1.3125" 262.5' 9.50%	.5625" 112.5' 4.07%	-- -- --	-- -- --
1963	13.8125" 2762.5' 100.0%	7.8125 1562.5' 56.56%	-- -- --	4.625" 925.0' 33.48%	1.375" 275.0' 9.96%	-- -- --	-- -- --
1953	13.8125" 2762.5' 100.0%	2.000" 400' 14.48%	-- -- --	6.9375" 1387.5' 50.24%	4.875" 975' 35.29%	-- -- --	-- -- --
1942	12.8125 " 2762.5' 100.0%	1.8125" 362.5' 13.12%	-- -- --	6.9375" 1387.5' 50.23%	5.0625" 1012.5' 36.65%	-- -- --	-- -- --
1933	13.8125 " 2762.5' 100.0%	1.5625" 312.5' 11.31%	-- -- --	5.250" 1050.0' 38.0%	7.000 " 1400' 50.68%	-- -- --	-- -- --
1923	13.8125 " 2762.5' 100.0%	.1875" 37.5' 1.36%	-- -- --	4.375 " 875.0' 31.67%	9.250 " 1850.0' 66.97%	-- -- --	-- -- --

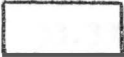




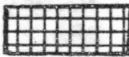
APPENDIX B - Table 3 -- Continued

Year	Total	Commercial	Commercial Unoccupied	Residential	Vacant	Public	Light Industrial
		 *	 *	 *	 *	 *	 *
Total	82.875"	25.3125"	--	29.4375"	28.125"	--	--
Over	16,575.0	5062.5'	--	5887.5'	5625.0'	--	--
Sixty	100.0%	30.54%	--	35.52%	33.94%	--	--
Years							
Total							
1974		86.43%	--	9.50%	4.07%	--	--
1963		56.56%	--	33.48%	9.96%	--	--
1953		14.48%	--	50.23%	35.29%	--	--
1942		13.12%	--	50.23%	36.65%	--	--
1933		11.31%	--	38.0%	50.69%	--	--
1923		1.36%	--	31.67%	66.97%	--	--

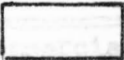
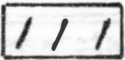
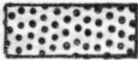


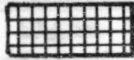
*As illustrated in Appendix A

APPENDIX B

Table 4. Minnesota Avenue 28th Street to 33rd Street from 1923 to 1974.

Year	Total	Commercial	Commercial Unoccupied	Residential	Vacant	Public	Light Industrial
		 *	 *	 *	 *	 *	 *
1974	17" 3400' 100.0%	12.000" 2400' 70.59%	.4375" 87.5' 2.57%	2.750" 550.0' 16.18%	.875 " 175.0' 5.14%	-- -- --	.9375" 187.5' 5.51%
1963	17" 3400' 100.0%	12.3125" 2462.5' 72.43%	-- -- --	3.000" 600.0' 17.65%	.750" 150.0' 4.41%	-- -- --	.9375" 187.5' 5.51%
1953	17" 3400' 100.0%	5.250" 1050.0' 30.88%	-- -- --	4.6875" 937.5' 27.57%	5.6875" 1137.5' 33.47%	.4375" 87.5' 2.57%	.9375" 187.5' 5.51%
1942	17" 3400' 100.0%	3.625" 725.0' 21.33%	-- -- --	3.9375" 787.5' 23.16%	8.500" 1700' 50.0%	-- -- --	.9375" 187.5' 5.51%
1933	17" 3400' 100.0%	8125" 162.5' 4.78%	-- -- --	3.6875" 737.5' 21.69%	12.500" 2500' 73.53%	-- -- --	-- -- --
1923	17" 3400' 100.0%	-- -- --	-- -- --	.375" 75.0' 2.21%	16.625" 3325.0' 97.79%	-- -- --	-- -- --

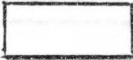




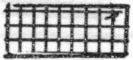
APPENDIX B - Table 4 -- Continued

Year	Total	Commercial	Commercial Unoccupied	Residential	Vacant	Public	Light Industrial
		 *	 *	 *	 *	 *	 *
Total	102.0"	34.000"	.4375"	18.4375"	44.9375"	.4375"	3.75"
Over	20,400'	6800.0'	87.5'	3687.5'	8987.5'	87.5'	750.0'
Sixty	100.0%	33.33%	.43%	18.07%	44.06%	.43%	3.68%
Years							
Total							
1974		70.59%	2.57%	16.18%	5.15%	--	5.51%
1963		72.43%	--	17.69%	4.41%	--	5.51%
1953		30.88%	--	27.57%	33.47%	2.57%	5.51%
1942		21.33%	--	23.16%	50.00%	--	5.51%
1933		4.78%	--	21.69%	73.53%	--	--
1923		--	--	2.21%	97.74%	--	--

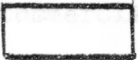

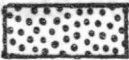



*As illustrated in Appendix A

APPENDIX B

Table 5. Minnesota Avenue 33rd Street to 37th Street from 1923 to 1974.

Year	Total	Commercial	Commercial Unoccupied	Residential	Vacant	Public	Light Industrial
		 *	 *	 *	 *	 *	 *
1974	11.625" 2325.0' 100.0%	8.625" 1725.0' 74.19%	.250" 50' 2.15%	-- -- --	2.750" 550' 23.66%	-- -- --	-- -- --
1963	11.625" 2325.0' 100.0%	8.125" 1625.0' 69.89%	-- -- --	-- -- --	3.500" 700.0' 30.11%	-- -- --	-- -- --
1953	11.625" 2325.0' 100.0%	5.750" 1150.0' 49.47%	.1875" 37.5' 1.61%	.1875" 37.5' 1.61%	5.500" 1100.0' 47.31%	-- -- --	-- -- --
1942	11.625" 2325.0' 100.0%	1.0625" 212.5' 9.14%	-- -- --	1.4375" 287.5' 12.37%	9.125" 1825.0' 78.49%	-- -- --	-- -- --
1933	11.625" 2325.0' 100.0%	.9375" 187.5' 8.06%	-- -- --	.9375" 187.5' 8.06%	9.750" 1950.0' 83.88%	-- -- --	-- -- --
1923	11.625" 2325.0' 100.0%	-- -- --	-- -- --	-- -- --	11.625" 2325.0' 100.0%	-- -- --	-- -- --

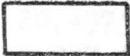

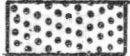


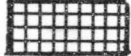
APPENDIX B - Table 5 -- Continued

Year	Total	Commercial	Commercial Unoccupied	Residential	Vacant	Public	Light Industrial
		 *	 *	 *	 *	 *	 *
Total	69.750"	24.500"	.4375"	2.5625"	42.250"	--	--
Over	13,950.0'	4,900.0'	87.5'	512.5'	8450.0'	--	--
Sixty	100.0%	35.13%	.63%	3.67%	60.57%	--	--
Years							
Total							
1974		74.19%	2.15%	--	23.66%	--	--
1963		69.89%	--	--	30.11%	--	--
1953		49.47%	1.61%	1.61%	47.31%	--	--
1942		9.14%	--	12.37%	78.49%	--	--
1933		8.06%	--	8.06%	83.88%	--	--
1923		--	--	--	100.00%	--	--


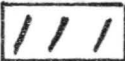




*As illustrated in Appendix A

APPENDIX B

Table 6. Minnesota Avenue 37th Street to 41st Street from 1923 to 1974.

Year	Total	Commercial	Commercial Unoccupied	Residential	Vacant	Public	Light Industrial
		 *	 *	 *	 *	 *	 *
1974	12.000"	9.9375"	--	--	2.0625"	--	--
	2400.0'	1987.5'	--	--	412.5'	--	--
	100.0%	82.81%	--	--	17.19%	--	--
1963	12.000"	7.125"	--	--	4.875"	--	--
	2400.0'	1425.0'	--	--	975.0'	--	--
	100.0%	59.37%	--	--	40.63%	--	--
1953	12.000"	3.375"	.4375"	.3750"	7.8125"	--	--
	2400.0'	675.0'	87.5'	75.0'	1562.5'	--	--
	100.0%	28.12%	3.65%	3.13%	65.10%	--	--
1942	12.000"	--	--	.5625"	11.4375"	--	--
	2400.0'	--	--	112.5'	2287.5'	--	--
	100.0%	--	--	4.69%	95.31%	--	--
1933	12.000"	--	--	--	12.000"	--	--
	2400.0'	--	--	--	2400.0'	--	--
	100.0%	--	--	--	100.0%	--	--
1923	12.000"	--	--	--	12.000"	--	--
	2400.0'	--	--	--	2400.0'	--	--
	100.0%	--	--	--	100.0%	--	--






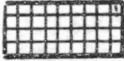
APPENDIX B - Table 6 -- Continued

Year	Total	Commercial	Commercial Unoccupied	Residential	Vacant	Public	Light Industrial
		 *	 *	 *	 *	 *	 *
Total	72.000"	20.4375"	.4375"	.9375"	50.1875"	--	--
Over	14,400.0'	4,087.5'	87.5'	187.5'	10,037.5'	--	--
Sixty	100.0%	28.39%	.61%	1.30%	69.70%	--	--
Years							
Total							
1974		82.81%	--	--	17.19%	--	--
1963		59.37%	--	--	40.63%	--	--
1953		28.17%	3.65%	3.31%	65.10%	--	--
1942		--	--	4.69%	95.31%	--	--
1933		--	--	--	100.00%	--	--
1923		--	--	--	100.00%	--	--






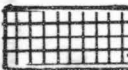
*As illustrated in Appendix A

APPENDIX B

Table 7. Minnesota Avenue 14th Street to 41st Street from 1923 to 1974.

Year	Total	Commercial	Commercial Unoccupied	Residential	Vacant	Public	Light Industrial
		 *	 *	 *	 *	 *	 *
1974	83.1875" 16,637.5' 100.0%	61.1875" 12,237.5' 73.55%	1.1875" 237.5' 1.43%	12.4375" 2487.5' 14.95%	7.0625" 1412.5' 8.50%	.375" 75.0' .45%	.9375" 187.5' 1.12%
1963	83.1875" 16,637.5' 100.0%	49.000" 9,800' 58.90%	.1875" 37.5' .23%	18.6875" 3,737.5' 22.47%	14.000" 2,800' 16.83%	.375" 75.0' .45%	.9375" 187.5' 1.12%
1953	83.1875" 16,637.5' 100.0%	24.500" 4,900.0' 29.45%	.625" 125.0' .75%	27.8125" 5,562.5' 33.44%	27.8750" 5,575.0' 33.51%	1.4375" 287.5' 1.73%	.9375" 187.5' 1.12%
1942	83.1875" 16,637.5' 100.0%	10.625" 2125.0' 12.78%	0.0 0.0 0.0%	29.0625" 5812.5' 34.94%	41.5625" 8312.5' 49.96%	1.000" 2000.0' 1.20%	.9375" 187.5' 1.12%
1933	83.1875" 16,637.5' 100.0%	5.6875" 1137.5' 6.84%	0.0 0.0 0.0%	26.3125" 5,262.5' 31.63%	50.1875" 10,037.5' 60.33%	1.000" 200.0' 1.20%	0.0" 0.0' 0.0%
1923	83.1875" 16,637.5' 100.0%	1.000" 200.0' 1.20%	0.0 0.0 0.0%	21.3750" 4,275.0' 25.70%	60.5625" 12,112.5' 72.80%	.250" 50.0' .30%	0.0 0.0 0.0%

APPENDIX B - Table 7 -- Continued

Year	Total	Commercial	Commercial Unoccupied	Residential	Vacant	Public	Light Industrial
		 *	 *	 *	 *	 *	 *
Total	499.125"	152.00"	2.000"	135.6875"	201.250"	4.4375"	3.7500"
Over	99,825.0'	30,400'	400.0'	27,137.5'	40,250.0'	887.5'	750.0'
Sixty	100.0%	30.45%	.40%	27.19%	40.32%	.89%	.75%
Years							
Total							
1974		73.55%	1.43%	14.95%	8.5%	.45%	1.12%
1963		58.90%	.23%	22.47%	16.83%	.45%	1.12%
1953		29.45%	.75%	33.44%	33.51%	1.73%	1.12%
1942		12.78%	--	34.94%	49.96%	1.70%	1.12%
1933		6.84%	--	31.63%	60.33%	1.70%	--
1923		1.20%	--	25.70%	72.80%	.30%	--

*As illustrated in Appendix A

APPENDIX C

Industrial Classification Index

F. Wholesale Trade

Code	Short Title
50	<u>Wholesale Trade - Durable Goods</u>
501	Motor Vehicles & Automotive Equipment
5012	Automobiles and other motor vehicles
5013	Automotive parts and supplies
5014	Tires and tubes
502	Furniture and Home Furnishings
5021	Furniture
5023	Home furnishings
503	Lumber and Construction Materials
5031	Lumber, plywood and millwork
5039	Construction materials, nec
504	Sporting Goods, Toys, and Hobby Goods
5041	Sporting and recreational goods
5042	Toys and hobby goods and supplies
5043	Photographic equipment and supplies
505	Metals and Minerals, Except Petroleum
5051	Metals service centers and offices
5052	Coal and other minerals and ores
506	Electrical Goods
5063	Electrical apparatus and equipment
5064	Electrical appliances, TV and radios
5065	Electronic parts and Equipment
507	Hardware, Plumbing & Heating Equipment
5072	Hardware
5074	Plumbing & hydronic heating supplies
5075	Warm air heating & air conditioning
5078	Refrigeration equipment and supplies
508	Machinery, Equipment, and Supplies
5081	Commercial machines and equipment
5082	Construction and mining machinery
5083	Farm machinery and equipment
5084	Industrial machinery and equipment
5085	Industrial supplies
5086	Professional equipment and supplies
5087	Service establishment equipment
5088	Transportation equipment & supplies
509	Miscellaneous Durable Goods
5093	Scrap and waste materials
5094	Jewelry, watches, & precious stones
5099	Durable goods, nec*

* Non Essential Category

APPENDIX C - Continued

Code	Short Title
51	<u>Wholesale Trade - Nondurable Goods</u>
511	Paper and Paper Products
5111	Printing and writing paper
5112	Stationery supplies
5113	Industrial & personal service paper
512	Drugs, Proprietaries, and Sundries
5122	Drugs, proprietaries, and sundries
513	Apparel, Piece Goods, and Notions
5133	Piece goods
5134	Notions and other dry goods
5136	Men's clothing and furnishings
5137	Women's and children's clothing
5139	Footwear
514	Groceries and Related Products
5141	Groceries, general line
5142	Frozen foods
5143	Dairy products
5144	Poultry and poultry products
5145	Confectionery
5146	Fish and seafoods
5147	Meats and meat products
5148	Fresh fruits and vegetables
5149	Groceries and related products, nec
515	Farm-Product Raw Materials
5152	Cotton
5153	Grain
5154	Livestock
5159	Farm-product raw materials, nec
516	Chemicals and Allied Products
5161	Chemicals and allied products
517	Petroleum and Petroleum Products
5171	Petroleum bulk stations & terminals
5172	Petroleum products, nec
518	Beer, Wine, and Distilled Beverages
5181	Beer and ale
5182	Wines and distilled beverages
519	Miscellaneous Nondurable Goods
5191	Farm supplies
5194	Tobacco and tobacco products
5198	Paints, varnishes, and supplies
5199	Nondurable goods, nec
52	<u>Building Materials & Garden Supplies</u>
521	Lumber and Other Building Materials
5211	Lumber and other building materials
523	Paint, Glass, and Wallpaper Stores
5231	Paint, glass, and wallpaper stores

APPENDIX C - Continued

Code	Short Title
525	Hardware Stores
5251	Hardware stores
526	Retail Nurseries and Garden Stores
5261	Retail nurseries and garden stores
527	Mobile Home Dealers
5271	Mobile home dealers
53	<u>General Merchandise Stores</u>
531	Department Stores
5311	Department stores
533	Variety Stores
5331	Variety stores
539	Misc. General Merchandise Stores
5399	Misc. general merchandise stores
54	<u>Food Stores</u>
541	Grocery stores
5411	Grocery stores
542	Meat Markets and Freezer Provisioners
5422	Freezer and locker meat provisioners
5423	Meat and fish (seafood) markets
543	Fruit Stores and Vegetable Markets
5431	Fruit stores and vegetable markets
544	Candy, Nut, and Confectionery Stores
5441	Candy, nut, and confectionery stores
545	Dairy Products Stores
5451	Dairy products stores
546	Retail Bakeries
5462	Retail bakeries--baking and selling
5463	Retail bakeries--selling only
549	Miscellaneous Food Stores
5499	Miscellaneous food stores
55	<u>Automotive Dealers & Service Stations</u>
551	New and Used Car Dealers
5511	New and used car dealers
552	Used Car Dealers
5521	Used car dealers
553	Auto and Home Supply Stores
5531	Auto and home supply stores
554	Gasoline Service Stations
5541	Gasoline service stations

APPENDIX C - Continued

Code	Short Title
555	Boat Dealers
5551	Boat dealers
556	Recreation & Utility Trailer Dealers
5561	Recreation & utility trailer dealers
557	Motorcycle Dealers
5571	Motorcycle dealers
559	Automotive Dealers, nec
5599	Automotive dealers, nec
56	<u>Apparel and Accessory Stores</u>
561	Men's & Boys' Clothing & Furnishings
5611	Men's & boys' clothing & furnishings
562	Women's Ready-to-Wear Stores
5621	Women's ready-to-wear stores
563	Women's Accessory and Specialty Stores
5631	Women's accessory and specialty stores
564	Children's and Infants' Wear Stores
5641	Children's and Infants' wear stores
565	Family Clothing Stores
5651	Family clothing stores
568	Furriers and Fur Shops
5681	Furriers and fur shops
569	Miscellaneous Apparel & Accessories
5699	Miscellaneous apparel & accessories
57	<u>Furniture and Home Furnishings Stores</u>
571	Furniture and Home Furnishings Stores
5712	Furniture stores
5713	Floor covering stores
5714	Drapery and upholstery stores
5719	Misc. home furnishings stores
572	Household Appliance Stores
5722	Household appliance stores
573	Radio, Television, and Music Stores
5732	Radio and television stores
5733	Music stores
58	<u>Eating and Drinking Places</u>
581	Eating and Drinking Places
5812	Eating places
5813	Drinking places
59	<u>Miscellaneous Retail</u>
591	Drug Stores and Proprietary Stores
5912	Drug stores and proprietary stores

APPENDIX C - Continued

Code	Short Title
592	Liquor Stores
5921	Liquor stores
593	Used Merchandise Stores
5931	Used merchandise stores
594	Miscellaneous Shopping Goods Stores
5941	Sporting goods and bicycle shops
5942	Book stores
5943	Stationery stores
5944	Jewelry stores
5945	Hobby, toy, and game shops
5946	Camera & photographic supply stores
5947	Gift, novelty, and souvenir shops
5948	Luggage and leather goods stores
5949	Sewing, needlework, and piece goods
596	Nonstore Retailers
5961	Mail order houses
5962	Merchandising machine operators
5963	Direct selling organizations
598	Fuel and Ice Dealers
5982	Fuel and ice dealers, nec
5983	Fuel oil dealers
5984	Liquefied petroleum gas dealers
599	Retail Stores, nec
5992	Florists
5993	Cigar stores and stands
5994	News dealers and newsstands
5999	Miscellaneous retail stores, nec

H. Finance, Insurance, and Real Estate

60	<u>Banking</u>
601	Federal Reserve Banks
6011	Federal Reserve banks
602	Commercial and Stock Savings Banks
6022	State banks, Federal Reserve
6023	State banks, not Fed. Reserve, FDIC
6024	State banks, not Fed. Res., not FDIC
6025	National banks, Federal Reserve
6026	National banks, not Fed. Res., FDIC
6027	National banks, not FDIC
6028	Private banks, not incorp., not FDIC
603	Mutual Savings Banks
6032	Mutual savings banks, Federal Reserve
6033	Mutual savings banks, nec
6034	Mutual savings banks, not FDIC

APPENDIX C - Continued

Code	Short Title
604	Trust Companies, Nondeposit
6042	Nondeposit trusts, Federal Reserve
6044	Nondeposit trusts, not FDIC
605	Functions Closely Related to Banking
6052	Foreign exchange establishments
6054	Safe deposit companies
6055	Clearinghouse associations
6056	Corporations for banking abroad
6059	Functions related to banking, nec
61	<u>Credit Agencies Other Than Banks</u>
611	Rediscount and Financing Institutions
6112	Rediscounting, not for agricultural
6113	Rediscounting, for agricultural
612	Savings and Loan Associations
6122	Federal savings & loan associations
6123	State associations, insured
6124	State associations, noninsured, FHLB
6125	State associations, noninsured, nec
613	Agricultural Credit Institutions
6131	Agricultural credit institutions
614	Personal Credit Institutions
6142	Federal credit unions
6143	State credit unions
6144	Nondeposit industrial loan companies
6145	Licensed small loan lenders
6146	Installment sales finance companies
6149	Misc. personal credit institutions
615	Business Credit Institutions
6153	Short-term business credit
6159	Misc. business credit institutions
616	Mortgage Bankers and Brokers
6162	Mortgage bankers and correspondents
6163	Loan brokers
62	<u>Security, Commodity Brokers & Services</u>
621	Security Brokers and Dealers
6211	Security brokers and dealers
622	Commodity Contracts Brokers, Dealers
6221	Commodity contracts brokers, dealers
623	Security and Commodity Exchanges
6231	Security and commodity exchanges
628	Security and Commodity Services
6281	Security and commodity services
63	<u>Insurance Carriers</u>
631	Life Insurance

APPENDIX C - Continued

Code	Short Title
6311	Life insurance
632	Medical Service and Health Insurance
6321	Accident and health insurance
6324	Hospital and medical service plans
633	Fire, Marine, and Casualty Insurance
6331	Fire, marine, and casualty insurance
635	Surety Insurance
6351	Surety Insurance
636	Title Insurance
6361	Title insurance
637	Pension, Health, and Welfare Funds
6371	Pension, health, and welfare funds
639	Insurance Carriers, nec
6399	Insurance carriers, nec
64	<u>Insurance Agents, Brokers & Service</u>
641	Insurance Agents, Brokers & Service
6411	Insurance agents, brokers & service
65	<u>Real Estate</u>
651	Real Estate Operators and Lessors
6512	Nonresidential building operators
6513	Apartment building operators
6514	Dwelling operators, exc. apartments
6515	Mobile home site operators
6517	Railroad property lessors
6519	Real property lessors, nec
653	Real Estate Agents and Managers
6531	Real estate agents and managers
654	Title Abstract Offices
6541	Title abstract offices
655	Subdividers and Developers
6552	Subdividers and developers, nec
6553	Cemetery subdividers and developers
66	<u>Combined Real Estate, Insurance, etc</u>
661	Combined Real Estate, Insurance, Etc
6611	Combined real estate, insurance, etc
67	<u>Holding and Other Investment Offices</u>
671	Holding Offices
6711	Holding offices
672	Investment Offices
6722	Management investment, open-end
6723	Management investment, closed-end
6724	Unit investment trusts
6725	Face-amount certificate offices

APPENDIX C - Continued

Code	Short Title
673	Trusts
6732	Educational, religious, etc. trusts
6733	Trusts, nec
679	Miscellaneous Investing
6792	Oil royalty traders
6793	Commodity traders
6794	Patent owners and lessors
6799	Investors, nec

I. Services

70	<u>Hotels and Other Lodging Places</u>
701	Hotels, Motels, and Tourist Courts
7011	Hotels, motels, and tourist courts
702	Rooming and Boarding Houses
7021	Rooming and boarding houses
703	Camps and Trailering Parks
7032	Sporting and recreational camps
7033	Trailering parks for transients
704	Membership-Basis Organization Hotels
7041	Membership-basis organization hotels
72	<u>Personal Services</u>
721	Laundry, Cleaning, & Garment Services
7211	Power Laundries, family & commercial
7212	Garment pressing & cleaner's agents
7213	Linen supply
7214	Diaper service
7215	Coin-operated laundries and cleaning
7216	Dry cleaning plants, except rug
7217	Carpet and upholstery cleaning
7218	Industrial launderers
7219	Laundry and garment services, nec
722	Photographic Studios, Portrait
7221	Photographic studios, portrait
723	Beauty Shops
7231	Beauty shops
724	Barber Shops
7241	Barber shops
725	Shoe Repair and Hat Cleaning Shops
7251	Shoe repair and hat cleaning shops
726	Funeral Service and Crematories
7261	Funeral service and crematories
729	Miscellaneous Personal Services
7299	Miscellaneous personal services

APPENDIX C - Continued

Code	Short Title
73	<u>Business Services</u>
731	Advertising
7311	Advertising agencies
7312	Outdoor advertising services
7313	Radio, TV, publisher representatives
7319	Advertising, nec
732	Credit Reporting and Collection
7321	Credit reporting and collection
733	Mailing, Reproduction, Stenographic
7331	Direct mail advertising services
7332	Blueprinting and photocopying
7333	Commercial photography and art
7339	Stenographic and reproduction, nec
734	Services to Buildings
7341	Window cleaning
7342	Disinfecting and exterminating
7349	Building maintenance services, nec
735	News Syndicates
7351	News syndicates
736	Personnel Supply Services
7361	Employment agencies
7362	Temporary help supply services
7369	Personnel supply services, nec
737	Computer and Data Processing Services
7372	Computer programming and software
7374	Data processing services
7379	Computer related services, nec
739	Miscellaneous Business Services
7391	Research & development laboratories
7392	Management and public relations
7393	Detective and protective services
7394	Equipment rental and leasing
7395	Photofinishing laboratories
7396	Trading stamp services
7397	Commercial testing laboratories
7399	Business services, nec
75	<u>Auto Repair, Services, and Garages</u>
751	Automotive Rentals, Without Drivers
7512	Passenger car rental and leasing
7513	Truck rental and leasing
7519	Utility trailer rental
752	Automobile Parking
7523	Parking lots
7525	Parking structures

APPENDIX C - Continued

Code	Short Title
753	Automotive Repair Shops
7531	Top and body repair shops
7534	Tire retreading and repair shops
7535	Paint shops
7538	General automotive repair shops
7539	Automotive repair shops, nec
754	Automotive Services, Except Repair
7542	Car washes
7549	Automotive services, nec
76	<u>Miscellaneous Repair Services</u>
762	Electrical Repair Shops
7622	Radio and television repair
7623	Refrigeration service and repair
7629	Electrical repair shops, nec
763	Watch, Clock, and Jewelry Repair
7631	Watch, clock, and jewelry repair
764	Reupholstery and Furniture Repair
7641	Reupholstery and furniture repair
769	Miscellaneous Repair Shops
7692	Welding repair
7694	Armature rewinding shops
7699	Repair services, nec
78	<u>Motion Pictures</u>
781	Motion Picture Production & Services
7813	Motion picture production, except TV
7814	Motion picture production for TV
7819	Services allied to motion pictures
782	Motion Picture Distribution and Services
7823	Motion picture film exchanges
7824	Film or tape distribution for TV
7829	Motion picture distribution services
783	Motion Picture Theaters
7832	Motion picture theaters, ex drive-in
7833	Drive-in motion picture theaters
79	<u>Amusement & Recreation Services</u>
791	Dance Halls, Studios, and Schools
7911	Dance halls, studios, and schools
792	Producers, Orchestras, Entertainers
7922	Theatrical producers and services
7929	Entertainers & entertainment groups
793	Bowling and Billiard Establishments
7932	Billiard and pool establishments
7933	Bowling alleys

APPENDIX C - Continued

Code	Short Title
794	Commercial Sports
7941	Sports clubs and promoters
7948	Racing, including track operation
799	Misc. Amusement, Recreational Services
7992	Public golf courses
7993	Coin-operated amusement devices
7996	Amusement parks
7997	Membership sports & recreation clubs
7999	Amusement and recreation, nec
80	<u>Health Services</u>
801	Offices of Physicians
8011	Office of physicians
802	Offices of Dentists
8021	Offices of dentists
803	Offices of Osteopathic Physicians
8031	Offices of osteopathic physicians
804	Offices of Other Health Practitioners
8041	Offices of chiropractors
8042	Offices of optometrists
8049	Offices of health practitioners, nec
805	Nursing and Personal Care Facilities
8051	Skilled nursing care facilities
8059	Nursing and personal care, nec
806	Hospitals
8062	General medical & surgical hospitals
8063	Psychiatric hospitals
8069	Specialty hospitals, exc. psychiatric
807	Medical and Dental Laboratories
8071	Medical laboratories
8072	Dental laboratories
808	Outpatient Care Facilities
8081	Outpatient care facilities
809	Health and Allied Services, nec
8091	Health and allied services, nec
81	<u>Legal Services</u>
811	Legal Services
8111	Legal services
82	<u>Educational Services</u>
821	Elementary and Secondary Schools
8211	Elementary and secondary schools
822	Colleges and Universities
8221	Colleges and universities, nec
8222	Junior colleges

APPENDIX C - Continued

Code	Short Title
823	Libraries and Information Centers
8231	Libraries and information centers
824	Correspondence and Vocational Schools
8241	Correspondence schools
8243	Data processing schools
8244	Business and secretarial schools
8249	Vocational schools, nec
829	Schools & Educational Services, nec
8299	Schools & educational services, nec
83	<u>Social Services</u>
832	Individual and Family Services
8321	Individual and family services
833	Job Training and Related Services
8331	Job training and related services
835	Child Day Care Services
8351	Child day care services
836	Residential Care
8361	Residential care
839	Social Services, nec
8399	Social services, nec
84	<u>Museums, Botanical, Zoological Gardens</u>
841	Museums and Art Galleries
8411	Museums and art galleries
842	Botanical and Zoological Gardens
8421	Botanical and zoological gardens
86	<u>Membership Organizations</u>
861	Business Associations
8611	Business associations
862	Professional Organizations
8621	Professional organizations
863	Labor Organizations
8631	Labor organizations
864	Civic and Social Associations
8641	Civic and social associations
865	Political Organizations
8651	Political organizations
866	Religious Organizations
8661	Religious organizations
869	Membership Organizations, nec
8699	Membership organizations, nec
88	<u>Private Households</u>
881	Private Households
8811	Private households

APPENDIX C - Continued

Code	Short Title
89	<u>Miscellaneous Services</u>
891	Engineering & Architectural Services
8911	Engineering & architectural services
892	Noncommercial Research Organizations
8922	Noncommercial research organizations
893	Accounting, Auditing & Bookkeeping
8931	Accounting, auditing & bookkeeping
899	Services, nec
8999	Services, nec
91	<u>Executive, Legislative, and General</u>
911	Executive Offices
9111	Executive offices
912	Legislative Bodies
9121	Legislative bodies
913	Executive and Legislative Combined
9131	Executive and legislative combined
919	General Government, nec
9199	General government, nec
92	<u>Justice, Public Order, and Safety</u>
921	Courts
9211	Courts
922	Public Order and Safety
9221	Police protection
9222	Legal counsel and prosecution
9223	Correctional institutions
9224	Fire protection
9229	Public order and safety, nec
93	<u>Finance, Taxation & Monetary Policy</u>
931	Finance, Taxation & Monetary Policy
9311	Finance, taxation & monetary policy
94	<u>Administration of Human Resources</u>
941	Admin. of Educational Programs
9411	Admin. of educational programs
943	Admin. of Public Health Programs
9431	Admin. of public health programs
944	Admin. of Social & Manpower Programs
9441	Admin. of social & manpower programs
945	Administration of Veterans' Affairs
9451	Administration of veterans' affairs

APPENDIX C - Continued

Code	Short Title
95	<u>Environmental Quality and Housing</u>
951	Environmental Quality
9511	Air, water & solid waste management
9512	Land, mineral, wildlife conservation
953	Housing and Urban Development
9531	Housing programs
9532	Urban and community development
96	<u>Administration of Economic Programs</u>
961	Admin. of General Economic Programs
9611	Admin. of general economic programs
962	Regulation, Admin. of Transportation
9621	Regulation, admin. of transportation
963	Regulation, Admin. of Utilities
9631	Regulation, admin. of utilities
964	Regulation of Agricultural Marketing
9641	Regulation of agricultural marketing
965	Regulation Misc. Commercial Sectors
9651	Regulation misc. commercial sectors
966	Space Research and Technology
9661	Space research and technology
97	<u>National Security and Intl. Affairs</u>
971	National Security
9711	National security
972	International Affairs
9721	International affairs

K. Nonclassifiable Establishments

99	<u>Nonclassifiable Establishments</u>
999	Nonclassifiable Establishments
9999	Nonclassifiable establishments

APPENDIX D

Table 1. Commercial SIC Code for 14th Street to 18th Street from 1923 to 1974.

SIC	1923		1933		1942		1953		1963		1974	
	In.	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.	Ft.
5074					.250"	50.0'						
5086					.1875"	37.5'						
541			.4375"	87.5'	.4375"	87.5'	.4375"	87.5'				
554							.4375"	87.5'	1.500"	300.0'	1.0"	250.0'
5713											.250"	50.0'
573									.3125"	62.5'		
5812											1.125"	225.0'
5813											.250"	50.0'
591	.1875"	37.5'	.1875"	37.5'	.1875"	37.5'	.1875"	37.5'	.1875"	37.5'		
592											.250"	50.0'
5947											.250"	50.0'
641									.1875"	37.5'		
653									.1875"	37.5'	.8125"	162.5'
723									.1875"	37.5'		
726									.500"	100.0'	.5000"	100.0'
764											.250"	50.0'
802									.1875"	37.5'		
8041					.1875"	37.5'	.1875"	37.5'	.1875"	37.5'		
836											.250"	50.0'
TOTAL	.1875"	37.5'	.625"	125.0'	1.250"	250.0'	1.250"	250.0'	3.4375"	687.5'	5.3125"	1062.5'

APPENDIX D

Table 2. Commercial SIC Code for 18th Street to 23rd Street from 1923 to 1974.

SIC	1923		1933		1942		1953		1963		1974	
	In.	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.	Ft.
501											.375"	75.0"
506							.250"	50.0'				
507									.3125"	62.5'		
508							.250"	50.0'	.250"	50.0'	.125"	25.0'
509									.250"	50.0'	.250"	50.0'
5091									.250"	50.0'	.250"	50.0'
523							.1875"	37.5'	.1875"	37.5'	.5625"	112.5'
525							.672"	125.0'	.5000"	100.0'	.5000"	100.0'
543									.1875"	37.5'	.1875"	37.5'
545					.1875"	37.5'	.250"	50.0'				
546			1.3125"	262.5'	1.8750"	375.0'						
551											1.4375"	287.5'
554			1.3125"	262.5'	1.8750"	375.0'	2.475"	487.5'	4.0675"	812.5'	4.750"	950.0'
573							.250"	50.0'				
5812											.1875"	37.5'
5813											.1875"	37.5'
5892									.1875"	37.5'		
592							.1875"	37.5'	.1875"	37.5'	.1875"	37.5'
5992					.1875"	37.5'			.1875"	37.5'		
5999											.1875"	37.5'
641							.4375"	87.5'	.8125"	162.5'	1.00"	200.0'
651											.1875"	37.5'
653									.125"	25.0'	.125"	25.0'

APPENDIX D - Table 2 -- Continued

SIC	1923		1933		1942		1953		1963		1974	
	In.	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.	Ft.
722							.250"	50.0'				
776							.3125"	62.5'				
801	.375"	75.0'	.1875"	37.5'	.1875"	37.5'	.375"	75.0'	1.125	225.0'	1.1875"	237.5'
802					.3175"	62.5'	.375"	75.0'	.1875"	37.5'	.1875"	37.5'
8041	.250"	50.0'	.250"	50.0'	.125"	25.0'			.250"	50.0'	.250"	50.0'
807									.250"	50.0'	.675"	125.0'
809							.3125"	62.5'				
865											.1875"	37.5'
964									.250"	50.0'	.250"	50.0'
999									.4375"	87.5'		
TOTAL	.625"	125.0'	1.75"	350.0'	2.875"	575.0'	6.875"	1375.0'	10.1875"	2037.5'	13.375"	2675.0'

APPENDIX D

Table 3. Commercial SIC Code for 23rd Street to 28th Street from 1923 to 1974.

SIC	1923		1933		1942		1953		1963		1974	
	In.	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.	Ft.
533							.1875"	37.5'				
541			.1875"	37.5'	.5625"	102.5'	.500"	100.0'	.625"	125.0'	.5626"	112.5'
551									.3125"	62.5'		
552											1.3125"	262.5'
553											.3125"	62.5'
554			.6875"	137.5'	.3125"	62.5'	.6875"	137.5'	1.250"	250.0'	1.3125"	262.5'
563									.3125"	62.5'	.500"	100.0'
564							.1875"	37.5'				
573									.250"	50.0'	.375"	75.0'
581									.250"	50.0'	.4375"	87.5'
5812											.125"	25.0'
591					.2500"	50.0'	.500"	100.0'				
592							.1875"	37.5'	.500"	100.0'	.125"	25.0'
5946			.1875"	37.5'	.2500"	50.0'						
5947									.1875"	37.5'	.3125"	62.5'
599									.1875"	37.5'	.0625"	12.5'
5999											.250"	50.0'
602											.3125"	62.5'
614											.5000"	100.0'
641							.375"	75.0'	.1875"	37.5'	.4375"	87.5'
653									.5625"	112.5'	.1875"	37.5'
724			.5000"	100.0'	.2500"	50.0'	.1875"	25.0'	.1875"	37.5'	.375"	75.0'
729							.1875"	37.5'				
801									1.1875"	237.5'	2.3125"	462.5'

APPENDIX D - Table 3 - Continued

SIC	1923		1933		1942		1953		1963		1974	
	In.	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.	Ft.
802									.500"	100.0'	.1875"	37.5'
804									.1875"	37.5'		
8042											.250"	50.0'
808									.1875"	37.5'		
865											.4375"	57.5'
999	.1875"	37.5'			.1875"	37.5'					.8125"	162.5'
<hr/>												
TOTAL	.1875"	37.5'	1.5625"	312.5'	.1875"	37.5'	3.000"	600.0'	6.875"	1375.0'	9.1875"	1837.5'

APPENDIX D

Table 4. Commercial SIC Code for 28th Street to 33rd Street from 1923 to 1974.

SIC	1923		1933		1942		1953		1963		1974	
	In.	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.	Ft.
502			.250"	50.0'								
506							.1875"	37.5'	.1875"	37.5'		
523							.125"	25.0'	.5000"	100.0'	.8125"	162.5'
525							.1875"	37.5'	.1875"	37.5'		
541			.1875"	37.5'			.625"	125.0'	.3125"	62.5'	.1875"	37.5'
542									.8750"	175.0'		
551					2.000"	400.0'	2.000"	400.0'	2.000"	400.0'	1.500"	300.0'
552							2.000"	400.0'	.375"	75.0'	.7500"	150.0'
554									1.000"	200.0'	.8125"	162.5'
556							.4375"	87.5'				
562									.1875"	37.5'		
564									.250"	50.0'	.1875"	37.5'
566									.1875"	37.5'	.375"	75.0'
571									.1875"	37.5'		
572											.1875"	37.5'
573									.1875"	37.5'	.1875"	37.5'
581									1.5625"	312.5'		
5812					1.4375"	287.5'	1.125"	225.0'			1.7500"	350.0'
5813											.9375"	187.5'
584									.250"	50.0'		
5852									.4375"	87.5'		
5942											.250"	50.0'
5947											.1875"	37.5'
5949											.250"	50.0'
596									.1875"	37.5'	.1875"	37.5'
5992			.1875"	37.5'	.1875"	37.5'	.1875"	37.5'	.250"	50.0'	.1875"	37.5'

APPENDIX D - Table 4 -- Continued

SIC	1923		1933		1942		1953		1963		1974	
	In.	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.	Ft.
613									.1875"	37.5'		
615									.1875"	37.5'	.1875"	37.5'
641			.1875"	37.5'					.1875"	37.5'	.1875"	37.5'
653									.5625"	112.5'	.250"	50.0'
721									.375"	75.0'	.1875"	37.5'
731									.250"	50.0'	.250"	50.0'
7394											.1875"	37.5'
753							.375"	75.0'	.5000"	100.0'	.4375"	87.5'
801									.125"	25.0'		
802											.4375"	87.5'
816									.125"	25.0'		
8512											.3125"	62.5'
865											.1875"	37.5'
999									.375"	75.0'	.625"	125.0'
TOTAL			.8125"	162.5'	3.625"	725.0'	5.250"	1050.0'	12.3125"	2462.5'	12.000"	2400.0'

APPENDIX D

Table 5. Commercial SIC Code for 33rd Street to 37th Street from 1923 to 1974.

SIC	1923		1933		1942		1953		1963		1974	
	In.	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.	Ft.
501							.250"	50.0'				
508							.250"	50.0'				
5261							.7500"	150.0'	.625"	125'		
527							.4375"	87.5'				
531									2.250"	425'		167.5'
541							.5000"	100.0'				125.0'
545									.500"	200'		
546							.250"	50.0'				
553											.6875"	137.5'
554			.750"	150.0'	.8125"	162.5'	1.4375"	287.5'	.3125"	62.5'	.3125"	62.5'
561											.3125"	62.5'
5713									.250"	50.0'		
573											.500"	100.0'
581											.750"	150.0'
5812			.1875"	37.5'	.250"	50.0'			.500"	200.0'	1.3125"	262.5'
591							.250"	50.0'				
592									.1875"	37.5'	.375"	75.0'
599									.250"	50.0'		
602							.500"	100.0'	.5625"	112.5'	.5000"	100.0'
641											.250"	50.0'
721							.375"	75.0'			.5000"	100.0'
7215									.750"	50.0'		
724									.500"	200.0'		
7531							.1875"	37.5'				
754									.4375"	87.5'	.3125"	62.5'
999							.8125"	162.5'	.750"	150.0'	.750"	150.0'
TOTAL			.9375"	187.5'	1.0675"	212.5'	5.750"	1150.0'	8.125"	1625.0'	8.675"	1725.0'

APPENDIX D

Table 6. Commercial SIC Code for 37th Street to 41st Street from 1923 to 1974.

SIC	1923		1933		1942		1953		1963		1974	
	In.	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.	Ft.
507									.4375"	87.5'		
5083							.750"	150.0'	.750"	150.0'		
5141							.375"	75.0'	.375"	75.0'		
523							.3125"	62.5'	.4375"	87.5'	.4375"	87.5'
531									1.500"	300.0'	2.125"	425.0'
544									.750"	150.0'		
551											3.000"	600.0'
554							.4375"	87.5'	1.000"	200.0'	1.500"	300.0'
569											.250"	50.0'
571							.500"	100.0'	.625"	125.0'	.8750"	175.0'
573											.375"	75.0'
5812							.3125"	62.5'	.750"	150.0'	.675"	125.0'
5999							.3125"	62.5'				
723											.250"	50.0'
734									.4375"	87.5'		
799											.500"	100.0'
999							.375"	75.0'				
TOTAL							3.375"	675.0'	7.125"	1425.0'	9.9375"	1987.5'

APPENDIX E

Sioux Falls Reference Map

